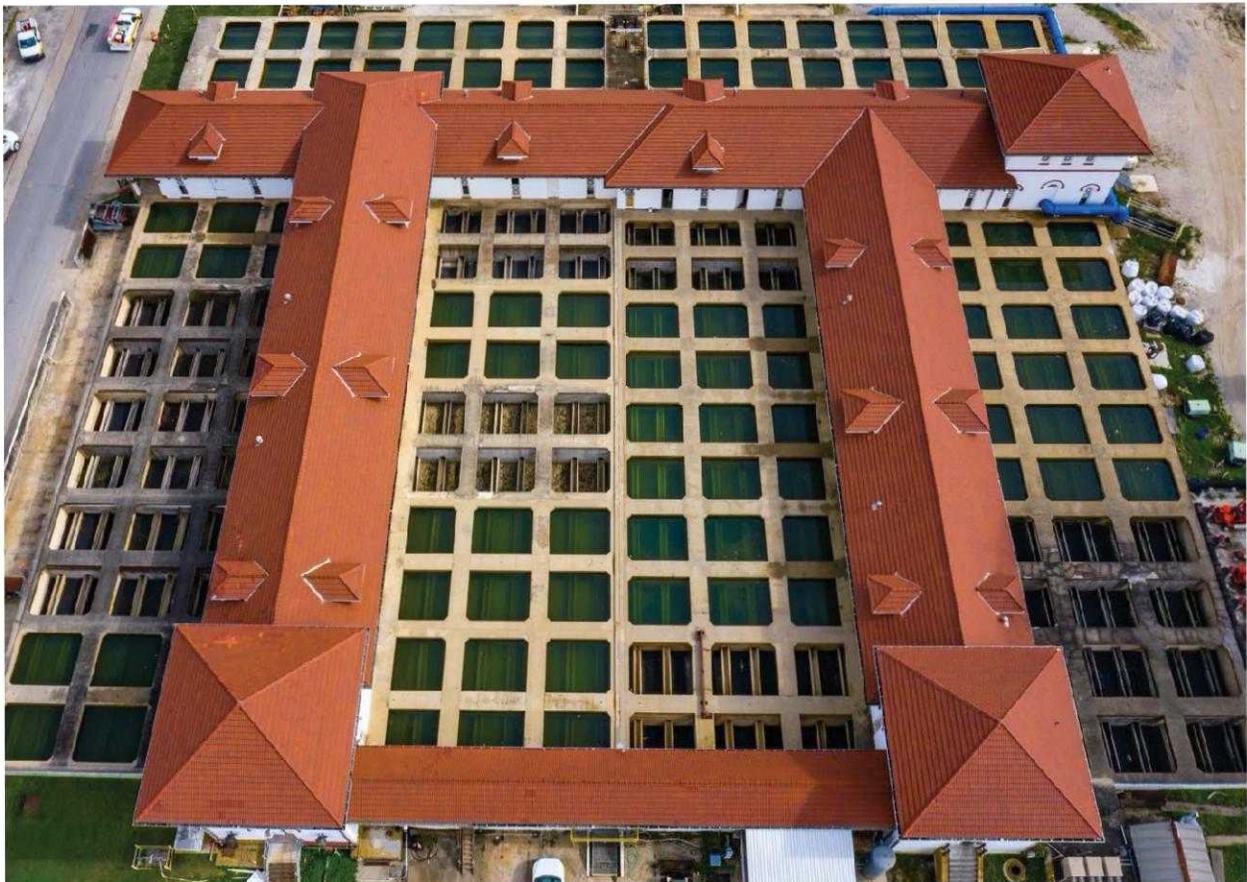




# Comprehensive Annual Financial Report

For the years ended December 31, 2019 and 2018

**THE SEWERAGE AND WATER BOARD  
OF NEW ORLEANS, LOUISIANA**



**Cover: Our Sycamore Filter Gallery was completed in 1905 and is still in use today. As the river water enters the Carrollton Plant, the purification process begins. The Carrollton plant normally yields about 135 million gallons per day of finished water for the east bank of Orleans Parish. The Algiers Plant, which serves the predominantly residential west bank portion of the parish, purifies about 11 million gallons per day of water. Combined, the two plants treat approximately 54 billion gallons of water per year, removing 18,000 tons of solid material from the raw river water.**

**SEWERAGE AND WATER BOARD  
OF NEW ORLEANS**

**Comprehensive Annual Financial Report  
For The Years Ended  
December 31, 2019 and 2018**

**Prepared by:  
FINANCE DEPARTMENT**



# Sewerage & Water Board of New Orleans

## Our Mission & Vision

### Our Mission

We serve the people of New Orleans and improve their quality of life by providing safe drinking water; removing waste water for safe return to the environment; and draining storm water to protect our community. Our team of experts do this reliably, continuously, and at a reasonable cost.

### Our Vision

Our vision is to earn and hold the trust and confidence of our customers and community for reliable and sustainable water services; and to be a model utility in the water industry.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

Comprehensive Annual Financial Report  
Years ended December 31, 2019 and 2018

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# INTRODUCTORY SECTION



**Previous Comprehensive Annual Financial Reports (CAFR) displayed the progress of our Water Hammer Mitigation Program. The two new elevated water towers now stand at the Carrollton Water Plant with a combined capacity of 400 million gallons of water.**



"RE-BUILDING THE CITY'S WATER SYSTEMS FOR THE 21<sup>ST</sup> CENTURY"

# Sewerage & Water Board OF NEW ORLEANS

625 ST. JOSEPH STREET  
NEW ORLEANS, LA 70165 • 504-529-2837 OR 52-WATER  
[www.swbno.org](http://www.swbno.org)

August 18, 2020

TO: The Honorable LaToya Cantrell, President, and  
Members of the Sewerage and Water Board of New Orleans  
625 St. Joseph Street  
New Orleans, LA 70165

We respectfully submit the enclosed Comprehensive Annual Financial Report (CAFR) for the Sewerage and Water Board of New Orleans (SWBNO) for the years ended December 31, 2019 and 2018. This yearly report provides our Board of Directors, investors, customers, and the public at large with the utility's latest, most complete financial portrait.

It is our belief that the data, as presented, is accurate in all material respects. This report is designed to fairly present SWBNO's financial position and results of operation for the SWBNO Enterprise and Pension Trust Funds. Disclosures necessary to enable the reader to gain an understanding of SWBNO's financial activities are included.

SWBNO retained Postlethwaite & Netterville (P&N), a Professional Accounting Corporation, to serve as its independent auditor. P&N has issued an unmodified opinion on SWBNO's financial statements for the years ended December 31, 2019 and 2018. The independent auditors' report is located at the front of the Financial Section of this report.

## THE COMPREHENSIVE ANNUAL FINANCIAL REPORT

The CAFR is organized in four sections:

**Introductory Section:** This section includes this letter of transmittal, as well as various governance, leadership and organizational charts. This transmittal letter is designed to complement the Management's Discussion and Analysis (MD&A) (see Financial Section) and should be read in conjunction with it.

**Financial Section:** This section includes the Independent Auditors' Report, the MD&A, basic financial statements, notes to financial statement, required supplementary information (RSI), and supplementary information. The MD&A is required by the Governmental Accounting Standards Board (GASB) that provides an overview and analysis of the basic financial statements.

**Statistical Section:** This section presents graphs and details that demonstrate financial trends and revenue and debt information as context for understanding SWBNO's overall financial health and operating capacity.

**Supplemental Section:** This section includes additional historical schedules.

The basic financial statements were prepared in accordance with U.S. Generally Accepted Accounting Principles (GAAP) and audited by independent certified public accountants retained by SWBNO. SWBNO is a component unit of the City of New Orleans as described in GASB Statement No. 61, *The Financial Reporting Entity: Omnibus – an amendment of GASB Statement No. 14 and No. 34 and GASB Codification Section 2100*.

Pursuant to LA Revised Statutes § 24:513 (A), SWBNO is required to have its financial position examined and audited each year by licensed certified public accountants.

SWBNO's management is responsible for the reliability of the information contained in this report, based upon a comprehensive framework of internal control that is established for this purpose. The internal control framework is designed to give reasonable assurance that cost on internal controls should not exceed the benefits derived from the controls and that the financial statements are free from material misstatements. The internal control over financial reporting is a process designed by, or under the supervision of, SWBNO's executive director, chief financial officer, and finance administrator, and effected by the Board of Directors, management, and other personnel to provide reasonable assurance regarding the reliability of financial reporting in accordance with GAAP.

## **PROFILE OF SEWERAGE AND WATER BOARD OF NEW ORLEANS**

SWBNO is a public utility that owns, maintains and operates New Orleans' vast networks of water and sewer mains, as well as the components of the city's drainage system that are 36" or greater in diameter (primarily drainage canals).

The reporting entity includes the Enterprise Fund and the Pension Trust Fund. The Enterprise Fund is composed of three (3) independent systems: Water, Sewerage, and Drainage.

SWBNO was founded in 1899 by state law and merged with the New Orleans Drainage Commission in 1903 to eventually assume its present-day mission: To serve the people of New Orleans and improve their quality of life by providing safe drinking water; removing waste water for safe return to the environment; and draining storm water to protect the community. Its team of experts does this reliably, continuously, and at a reasonable cost. SWBNO's vision is to earn and hold the trust and confidence of our customers and community for reliable and sustainable water services, and to be a model utility in the water industry.

Today, SWBNO serves 364 square miles of the City of New Orleans, plus providing drainage services to approximately 2,550 acres of neighboring Jefferson Parish. Its drinking water comes from the Mississippi River. It operates a drainage system of approximately 280 miles of open and underground canals and 24 pumping stations that house 120 drainage pumps. The drainage and water systems are powered by a combination of modern, 60-Hertz electricity and self-generated, 25-Hertz power that dates to the early 20<sup>th</sup> century. SWBNO is under federal consent decree to overhaul New Orleans sewerage system. This effort is scheduled to be completed in 2025. Sewer operations are managed by an independent contractor.

This utility operates independently of city government under the oversight of its 11-member Board of Directors. Effective Jan 1, 2019 under state law, this governing body consists of:

- The mayor of the City of New Orleans, serving as president;
- A member of the City Council's Public Works, Sanitation and Environmental Committee or his/her designee;
- Two members of the city's debt manager, the Board of Liquidation, City Debt;
- Seven citizen members appointed by the mayor with consent of the City Council.
- Retired civil engineer (vacant as of December 31, 2019)

Citizen members must represent each of New Orleans' five City Council districts; two must be considered consumer advocates; and one must be a retired civil engineer. The Board of Directors is responsible for, amongst other things, passing resolutions, adopting the budget, appointing committees and hiring the Board's Executive Director and General Superintendent. The Executive Director is responsible for carrying out the policies and resolutions of the Board and overseeing day-to-day operations.

The water and sewerage systems, and overall administration of SWBNO, are primarily funded through services rates, which are approved by the New Orleans City Council. Maintenance, operations and improvements to the drainage system are primarily financed through three ad valorem taxes set at rates of 3 mills, 6 mills and 9 mills, which expire in 2046, 2027, and 2032, respectively. The SWBNO employs approximately 1,500 people and manages a \$239-million pension trust fund.

## **ECONOMIC GROWTH AND OUTLOOK**

One of the last major ports before the Mississippi River empties into the Gulf of Mexico, New Orleans is a central hub for commerce and an economic engine for the broader Gulf Coast region. It is also a large nexus for rail and truck routes. The recent 2019 mid-year estimates revealed the City of New Orleans experienced a slight decrease in population of 862 in 2019, compared to 391,006 in 2018. In addition, projections developed for our ongoing consent decree program indicate that citywide population could decrease an additional 13% by 2038 based on recent property-level occupancy trends analysis from 2010 to the fall of 2018, as well as analysis of planned residential projects and major institutional expansions throughout the City.

**Annual Estimates of the Resident Population: April 1, 2010 to July 1, 2019**  
**2019 Population Estimates**

<b>Population</b>	
 Population estimates, July 1, 2019, (V2019)	<b>390,144</b>
 Population estimates, July 1, 2018, (V2018)	391,006
 Population estimates base, April 1, 2010, (V2019)	343,828
 Population estimates base, April 1, 2010, (V2018)	343,828
 Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)	13.5%
 Population, percent change - April 1, 2010 (estimates base) to July 1, 2018, (V2018)	13.7%
 Population, Census, April 1, 2010	343,829

*Source: U.S. Census Bureau, Population Division*

New Orleans has a diverse economy with the main sectors being energy, advanced manufacturing, international trade, healthcare and tourism. It is the home to internationally known universities and hospitals. Some of the largest companies in New Orleans include: Ochsner Health System, Tulane University, Woodward Design + Build, Entergy Corporation, Hancock Whitney Corporation, Boh Bros Construction, and Superior Energy Services, Inc.

Tourism still remains one of the top revenue generators and contributes almost 43% of the city's sales taxes paid by visitors. Tourism largely led the post-Katrina economic recovery and brings in an average of \$9 billion per year. Millions of visitors come to New Orleans each year, supporting hundreds of restaurants, hotels and tourism-related businesses and employing tens of thousands of workers.

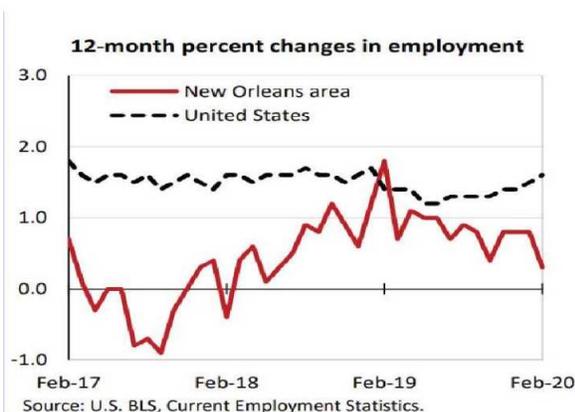
The New Orleans metropolitan area unemployment rate (4.5%) was lower than the State of Louisiana's rate (5.2%) and higher than the national rate (3.5%) at the end of 2019 according to the US Department of Labor. The unemployment rate for the New Orleans experienced an upward and downward trend throughout all four quarters of 2019.

**New Orleans, Louisiana Unemployment History**

Date	National Unemployment Rate	Louisiana Unemployment Rate	New Orleans Unemployment Rate	New Orleans Unemployed
February 2020	3.5%	—	—	—
January 2020	3.6%	5.3%	4.6%	27,599
December 2019	3.5%	5.2%	4.5%	26,808
November 2019	3.5%	5.2%	4.3%	25,783
October 2019	3.6%	5.2%	4.1%	24,840
September 2019	3.5%	5.1%	4.0%	24,212
August 2019	3.7%	4.9%	4.0%	24,157
July 2019	3.7%	4.7%	4.0%	24,216
June 2019	3.7%	4.6%	4.0%	24,192
May 2019	3.6%	4.5%	4.1%	24,333
April 2019	3.6%	4.5%	4.2%	24,955
March 2019	3.8%	4.5%	4.4%	26,129

*Source: U.S. BLS, Current Unemployment Statistics*

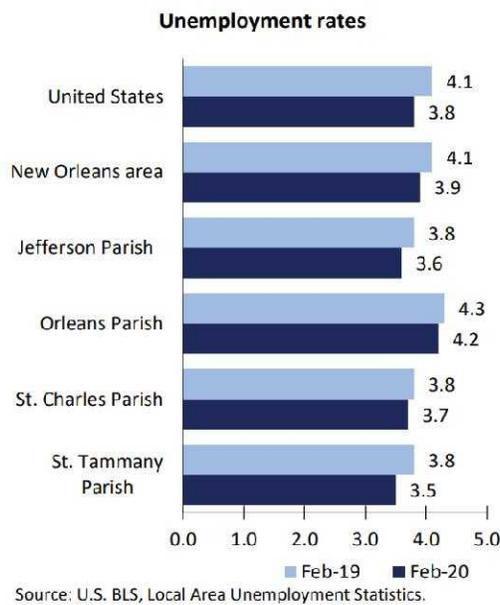
**Over-the Year Changes in Employment on Nonfarm Payrolls and Employment by Major Industry Sector; U.S. Department of Labor, Bureau of Labor Statistics**



New Orleans area employment (number in thousands)	Feb. 2020	Change from Feb. 2019 to Feb. 2020	
		Number	Percent
Total nonfarm	586.1	1.6	0.3
Mining and logging	4.4	0.2	4.8
Construction	27.3	-2.0	-6.8
Manufacturing	29.7	-0.6	-2.0
Trade, transportation, and utilities	110.9	-1.8	-1.6
Information	8.1	-0.9	-10.0
Financial activities	30.3	0.0	0.0
Professional and business services	77.1	1.1	1.4
Education and health services	106.3	3.8	3.7
Leisure and hospitality	93.8	1.9	2.1
Other services	24.4	0.0	0.0
Government	73.8	-0.1	-0.1

Source: U.S. BLS, Current Employment Statistics.

*Unemployment Rates for the Nation and Selected Areas; U.S. Department of Labor, Bureau of Labor Statistics*



Average hourly wages in the New Orleans area are lower than the U.S. national average. Occupations that reported the highest hourly wage include human resource managers, accountants and auditors, and registered nurses. Occupations with the lower hourly wages include construction laborers, retail salespersons, fast food workers and cooks.

Average hourly wages for selected occupations

Occupation	New Orleans area	United States
All occupations	\$22.65	\$24.98
Human resources managers	48.60	60.91
Accountants and auditors	36.28	37.89
Registered nurses	31.33	36.30
Construction laborers	15.81	19.40
Retail salespersons	14.03	13.61
Cooks, fast food	9.84	10.89

Source: U.S. BLS, Occupational Employment Statistics, May 2018.

According to Bestplaces.net, the 2019 cost of living index for the New Orleans metropolitan area was slightly below the average of many other metropolitan/non-metropolitan areas. The costs of food and groceries, healthcare, and utilities trend lower than many cities such as Washington D.C.

#### Cost of Living

	<b>New Orleans, LA</b>	<b>Washington, DC</b>	<b>United States</b>
<u>Overall</u>	96.3	152.1	100
<u>Food &amp; Groceries</u>	99.2	114.1	100
<u>Health</u>	85.2	88.6	100
<u>Housing</u>	77.2	240.8	100
<u>Median Home Cost</u>	<a href="#">\$178,500</a>	<a href="#">\$556,700</a>	\$231,200
<u>Utilities</u>	87.3	106.0	100
<u>Transportation</u>	132.5	135.3	100
<u>Miscellaneous</u>	97.8	105.7	100

100 = National Average (Below 100 means cheaper than the US average. Above 100 means more expensive.)

## MANAGEMENT INITIATIVES

Throughout 2019, SWBNO leadership sought to secure creative financing solutions for New Orleans’ long-existing infrastructure challenges. A landmark agreement known as the “Fair Share” deal was struck among SWBNO, the City of New Orleans, the State of Louisiana, and the hospitality industry to provide both one-time and recurring funds to SWBNO to improve its infrastructure. This package included \$50 million in one-time funding that helped secure a healthy financial position for the utility in 2019, as well as up to \$20 million in recurring funds to support identified drainage and infrastructure projects aimed at improving customers’ quality of life.

SWBNO also sought and won access to a major federal water infrastructure loan to fund the full rehabilitation of New Orleans’ sewer system in October 2019. Under the Water Infrastructure Financing and Innovation Act (WIFIA) program, the U.S. Environmental Protection Agency (EPA) chose SWBNO to apply for a low-interest, long-term loan – an effort that could yield up to \$111 million to help the utility make its 2025 federal deadline to completely restore the sewer system. It is expected that the loan will be closed in 2020 and the funds will be used to fund Sewer System Rehabilitation projects throughout the city over the next five years.

SWBNO also lobbied for and obtained the Louisiana State Bond Commission’s approval for the additional necessary funding to complete critical sewer repairs. The commission’s decision allowed SWBNO to borrow \$10 million from the federally funded Clean Water State Revolving Fund, which is administered by the Louisiana Department of Environmental Quality. The loan will carry a low interest rate of less than 1 percent. This new funding is critical for sewer repairs in the South Shore Basin, which is generally bounded by the Inner Harbor Navigational Canal, Lake Pontchartrain, Paris Road and Interstate 10 in New Orleans East.

As an ongoing effort to collaborate with our valued customers, a Customer Advisory Committee was created to develop a formal process that gives community members a voice within the utility's planning processes and decision-making structure. The Committee will help to guide SWBNO's Master Planning process and will also create a venue for staff to understand the community's needs and priorities so that the work we do reflects the values of the customers we serve.

## **FINANCIAL PLANNING**

The SWBNO is approaching the final year of water and sewerage rate increases. To plan for the future and to ensure financial stability, an increase in SWBNO's water and sewer rates was approved by the New Orleans City Council on December 6, 2012 and made effective on January 1, 2013. SWBNO is mostly financed by user fees, which cover water and sewer services only. The approved rate plan covered an eight-year period, increasing 10 percent each year until its sunset in 2020. SWBNO has initiated a rate study in 2020 to assess the need for future rate changes.

As stated above, SWBNO also receives revenues from the three-(3) mill, six-(6) mill and nine-(9) mill ad valorem taxes, which are restricted exclusively for the drainage system.

### ***General Operations***

The change in net position for the year ended December 31, 2019 was an increase of approximately \$111.5 million, as opposed to approximately \$75.8 million increase for the year ended December 31, 2018. The Board's total operating revenues increased by 24.5% to approximately \$263.0 million due primarily to rate increases effective January 1, 2019 and improved customer billing. Total non-operating revenue increased by 46.2% to approximately \$86.4 million due primarily to \$28 million in one-time funding from the Fair Share program and approximately \$7.1 million from the revolving loan fund, offset by a \$10.4 million change in the provision for grants deemed uncollectible.

### ***Budgetary Control***

SWBNO maintains an internal budgetary control through the preparation and monitoring of an annual operating and capital budget for the Water, Sewerage, and Drainage funds. The financial statements of revenues, expenses, and changes in net assets, statement of net assets, and statements of cash flow are prepared for each system. Also, monthly budget reports are provided to assist each department level manager in fiscal decision making.

The 2020 approved operating budget of \$281.1 million is 4% greater than the 2019 approved fiscal budget of \$270.3 million. The Board has \$405.1 million in outstanding senior lien debt: \$5.9 million in Drainage Bonds, \$205.5 million in Sewer Revenue Bonds and \$193.7 million in Water Revenue Bonds. SWBNO has been issued an "A" and an "A-" rating from Standard & Poor's Ratings Services (S&P) for the sewer system and water system, respectively, and a "BBB+" for the water system and sewer system from the Fitch Ratings. In addition, the S&P and Fitch Ratings for Special Tax Bonds is "AA-" and "A+", respectively.

## CAPITAL IMPROVEMENT PROGRAM

SWBNO has a 10-year capital improvement program that factors in resources and expenses for the repair, rehabilitation, and replacement of water, sewer, and drainage capital assets. The program provides the utility with the ability to compare the impact of future stability over the next ten years. This includes capital improvements to infrastructure for the completion of projects from Hurricane Katrina repairs, for ongoing rehabilitation, to handle anticipated growth, to maintain compliance with regulatory requirements, technology changes, and to bring the system into the 21st century.

At the close of 2019, there were 26 active contracts for capital projects, with a total value of \$156.8 million. There are also several active emergency contracts, which are those not anticipated in the capital improvement program, including:

**2019 – Turbine 5 Explosion:** On December 14, 2019 an explosion occurred in Turbine-Generator 5 at the SWBNO's Carrollton Water Plant. The explosion injured nearby personnel and caused significant damage to and around the turbine. The General Superintendent immediately declared an extreme emergency to provide for the safety of personnel, establish containment and stabilization of the power house, begin an assessment of the damage, investigate the cause of the incident, and address the risk to the water, sewer, and drainage systems powered by the Turbine-Generator. The emergency declaration will also extend to the potential replacement of the 20 Megawatts of generating capacity lost due to the explosion.

**2017 - Temporary Generators At Carrollton Frequency Changer, Drainage Pumping Station (DPS) 4, Citrus DPS, Dwyer DPS, Grant DPS, Maxent DPS, Oleander DPS, Elaine DPS, And SPS A And Temporary A/C Units At Power House #1 And Plant Frequency Changer - Requisition No. EE 17-0006:** \$5.5 million.

**2016 - Emergency Declaration At River Intakes:** \$1.1 million spent through 2019.

## WATER SYSTEM MAJOR INITIATIVES

Below is a list of the major water system initiatives completed in 2019 and those that are still in progress:

### **Carrollton Water Purification Plant**

- Construction of new filter backwash pump for Sycamore Filter Gallery completed.
- Construction and design of valves, actuators and controls at Sycamore Filter Gallery in progress.
- Design of new sludge line to the Mississippi River in progress.
- Design of new chemical bulk storage and feed facility completed.
- Design of Resiliency Complex including hardening of Engineering Building, rehabilitation of Head House Facility and new Infill Building completed.
- Design for the demolition to basins C7 and C8 completed.
- Design of improvement to Claiborne Ave Pumping, Panola and High Lift Stations completed.
- Conceptual study of new electrical substation on the west side of the facility completed.
- Development of a Power Master Plan that includes recommendations for construction of a new Entergy substation on SWBNO property, a back-up power generation facility that includes new technology machinery and static frequency converters, new and upgraded power distribution feeders, and conversion of pump motors from 25 hertz to standard 60 hertz completed.
- Design of the repairs to the fender system at New River and Oak St Raw Water Intake Structures in progress.
- Construction of 2M gallon water towers and associated piping completed.

### **Algiers Water Purification Plant**

- Design of water storage tank mixing in progress.
- Improvements to the Algiers Water Plant in progress including replacement of Clarifier 1, improvements to Clarifiers 2,3, and 4, a new fluorousilicic acid storage and feed system, and SCADA system under construction.
- Staff design of filter media replacement and repair to valves and actuators in progress.

### **Water Distribution System**

- Repairs and improvements to the Michoud Water Tank completed.
- Construction of secondary chlorination station in Venetian Isles completed.
- Ongoing coordination with the Department of Public Works to rehabilitate water mains in association with the Joint Infrastructure Recovery Roads Program and other roadway rehabilitation.
- Ongoing management of twenty-two engineering consultants designing water main replacement projects for approximately sixty-two neighborhoods.

### **Water Pumping and Power**

- Refurbishment of Steam Turbine Generator No. 4 completed.
- Replacement of various 25Hz power distribution cables in progress.
- Construction of emergency fuel storage improvements completed.
- Refurbishment and repairs of boilers 1-6 in progress.
- Design of new boiler controls, deaerators, piping, and SCADA completed.
- Replacement of 25Hz pumps, motors, electrical components, piping, flow meters and valves associated with Oak St Raw Water Intake Station in progress.
- Conversion of one distribution pump from steam turbine to 60 Hz motor.
- Design of new VFDs and motors for distribution pumps in progress.

### **SEWER SYSTEM INITIATIVES**

Below is a list of the major sewer system initiatives completed in 2019 and those that are still in progress:

#### **Sewerage Pumping Stations**

- Design of structural improvements to SPS A and Station D completed. Construction in progress.
- Construction of new Sewer Pumping Station No. 8 completed.
- Design of catch-all improvements of various sewage pumping stations completed.

#### **Wastewater Treatment Plants**

- Construction of Phase 2 Electrical Improvements completed.
- Construction for the installation of the sludge dryer in progress
- Design for a new 1000 HP effluent pump completed
- Preliminary design of a new 66" effluent discharge line to the Mississippi River in progress

## **DRAINAGE SYSTEM INITIATIVES**

Below is a list of the major drainage system initiatives completed in 2019 and those that are still in progress:

### **Drainage Pumping Stations**

- Construction of permanent emergency generators at five underpass pumping stations completed.
- Design of permanent emergency generators at three additional underpass stations completed.
- Rehabilitation of the Broad St Underpass Station in progress.
- Construction of the three new lakefront pumping stations (17th, Orleans & London) completed and operated by SLFPA-E.
- Construction of anti-siphon mechanisms at Drainage Pumping Station 1 completed.
- Construction of anti-siphon mechanisms at Drainage Pumping Station 4 in progress.
- Rehabilitation of Pumps C, D, and E at Drainage Pumping Station 4 completed.
- Additional SCADA instrumentation purchase and install in progress.

### **Canals**

- Construction of Florida Ave Canal Phases II/III from Peoples Ave is 95% complete.
- Construction of Florida Ave Canal Phase IV is 60% complete.
- Design of General DeGaulle Canal Improvements from Shirley Dr to Holiday Dr is in progress.

## **OTHER FINANCIAL INFORMATION AND SUBSEQUENT EVENTS**

SWBNO is pursuing a number of priority projects in 2020:

**Advanced Metering Infrastructure:** As of the submission of this letter, SWBNO has selected a Project Manager for a four-year, two-phase effort to bring Automated Metering Infrastructure (AMI) to its customers. AMI will benefit both SWBNO and its ratepayers in numerous ways, including generating real-time, accurate billing information, reducing estimated readings and re-billing costs, reducing billing errors and disputes, preventing tampering and theft, and promoting energy conservation and customer savings with time-of-use consumption. The project will be funded in part with Fair Share dollars.

**New Financial System:** SWBNO released an RFP for a new Financial Software System and Implementation. The purpose of this RFP is to purchase a financial system that interfaces with Microsoft Great Plains (GP) and CSM software systems. The financial system will incorporate the Procurement and Financial aspect of the SWBNO as well as the implementation. This software will provide for real-time accounting transactions, financial analysis, and efficient processes.

**Customer Service Management Upgrade:** SWBNO's staff worked closely with Cogsdale to upgrade our CSM billing system. This upgrade was completed in mid-June and will enhance customer service and bill collections by making the system more user-friendly and efficient.

**Sewer Bond Sales:** As part of its financial plan to meet the match requirements of the WIFIA loan and to fund additional sewer-related projects, SWBNO issued \$10.2 million in sewer bonds in June 2020. The terms of the issuance require principal payments beginning in 2022. SWBNO anticipates going back to the bond market in the fall for additional sewer enterprise funds.

On March 11, 2020, the World Health organization declared the novel strain of coronavirus (COVID-19) a global health pandemic and recommended containment and mitigation measure worldwide. Many water utilities and municipalities around the country are experiencing significant impacts as a result of COVID-19. SWBNO has closely monitored its revenue intake and cashflow for the past several months. Because revenue exceeded projected amounts for the first quarter, the impact on cashflow has been less than anticipated. Nevertheless, we are taking precautionary measures such as limiting new hires and suspending non-critical projects as our local economy recovers. We also have developed a Customer Care Plan, which includes automatic payment plans and suspension of late fees, to help our customers pay their bills and promote steady collections through the rest of the year and into 2021.

#### ACKNOWLEDGEMENTS

The preparation of this report could not have been accomplished without the efficient and dedicated services of the entire staff of SWBNO, and particularly the Finance Administration and Internal Audit departments.

The Board has many assets, but none more valuable than its employees. Of special note and deserving of recognition for service with distinction is former Finance Administrator Rosita Thomas, who recently retired after thirty-nine (39) years of service. We sincerely thank Ms. Thomas for her leadership, dedication and contributions to the Board – and we wish her well!

We also extend a special acknowledgement to all members of the Board of Directors for their unfailing support, leadership and high standard of professionalism in the management of SWBNO's finances. Of course, a special thanks goes out to the President of the Board, Mayor Latoya Cantrell, Governor John Bel Edwards, and our hospitality partners who played a vital role in obtaining much needed funding for SWBNO as we look toward rebuilding a strong infrastructure for the citizens and visitors of New Orleans.

Because of the dedication of its employees, SWBNO received the Government Finance Officers Association of the United States and Canada (GFOA) Certificate of Achievement for Excellence in Financial Reporting for past submissions of its Comprehensive Annual Financial Report (CAFR) for thirty-five (35) of the past thirty-eight (38) years. This Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized CAFR whose contents conform to program standards. Such CAFR must satisfy both generally accepted accounting principles and applicable legal requirements. The award is valid for a period of one (1) year only. We believe that the current report conforms to the Certificate of Achievement program requirements, and we will submit this CAFR to the GFOA.

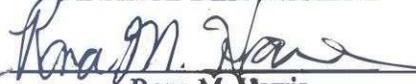
SWBNO hereby submits its Comprehensive Annual Financial Report for the fiscal year ended December 31, 2019.

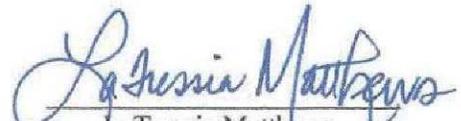
Respectfully submitted,

  
Ghassan Korban, Executive Director

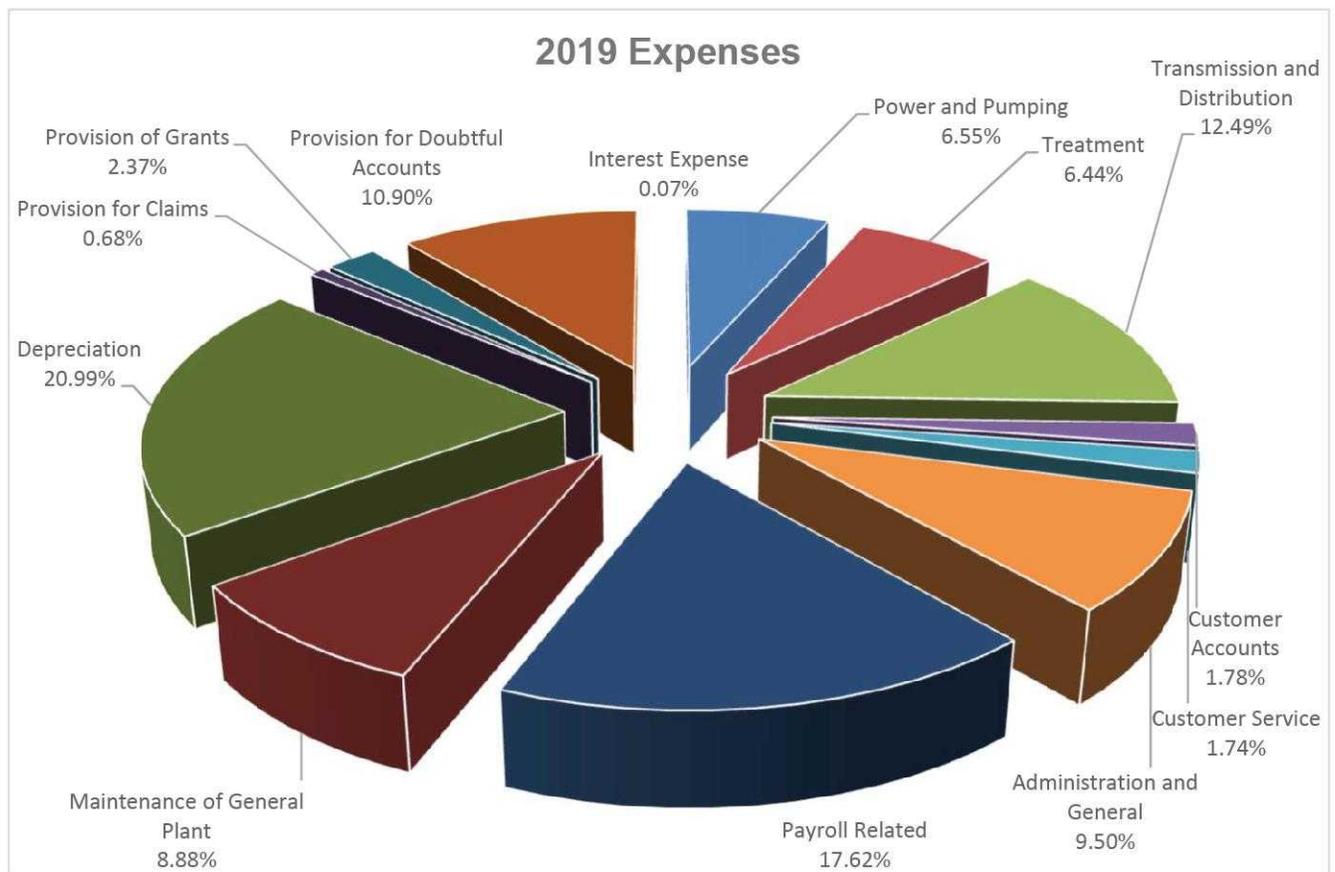
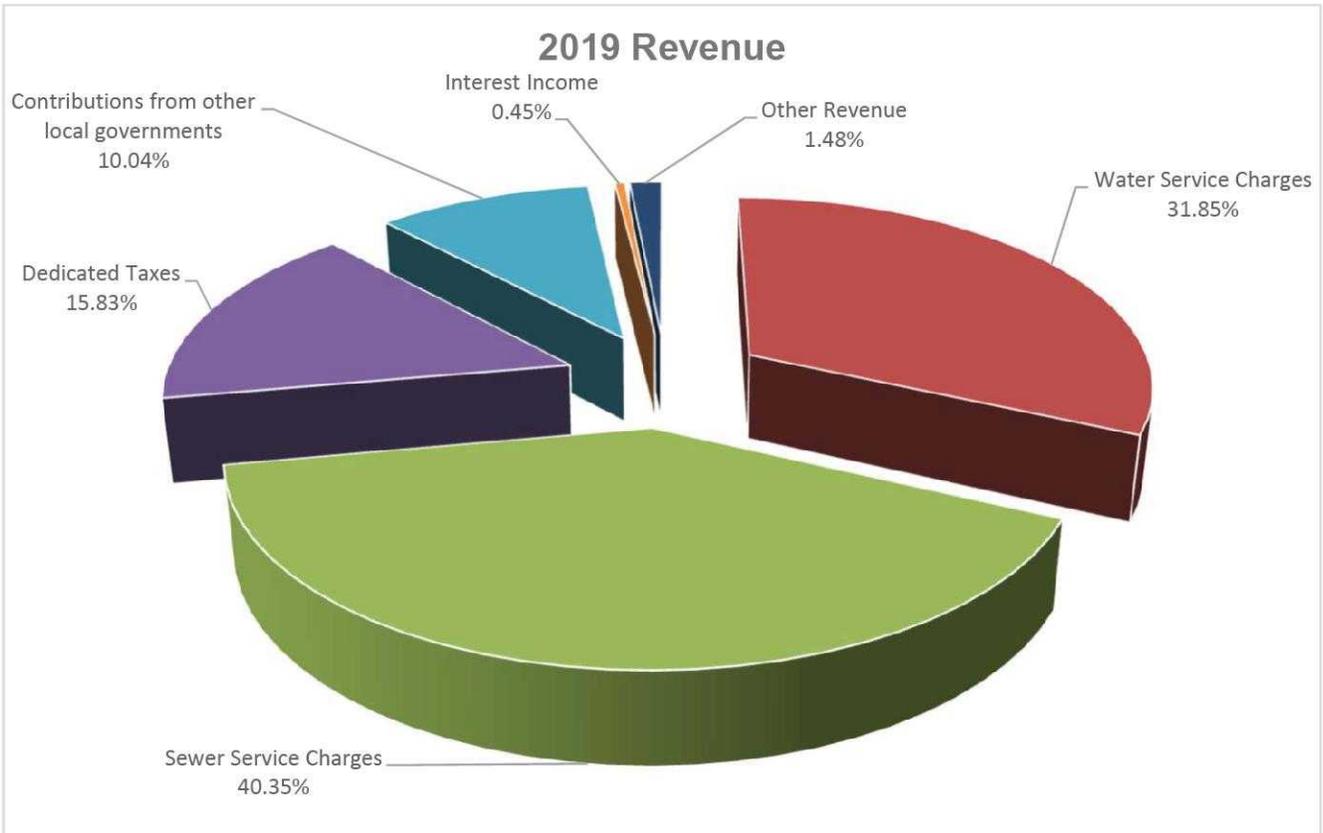
  
Hazel Bell  
Chief Accountant

FINANCE DEPARTMENT

  
Rona M. Harris  
Chief Accountant

  
LaTressia Matthews  
Chief Accountant

## Sewerage and Water Board of New Orleans



**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
BOARD OF DIRECTORS**

**December 31, 2019**

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Mayor Latoya Cantrell	<b>President</b>
Dr. Tamika Duplessis	<b>President Pro-Tem/District E</b>
Lynes Sloss	<b>Board of Liquidation</b>
Ralph Johnson	<b>Board of Liquidation</b>
Joseph E. Peychaud	<b>Consumer/Community Advocate</b>
Janet Howard	<b>Consumer/Community Advocate</b>
Alejandra Guzman	<b>District A</b>
Maurice Sholas	<b>District C</b>
Robin Barnes	<b>District B</b>
Jay H. Banks	<b>Councilmember</b>

**COMMITTEES OF THE  
SEWERAGE AND WATER BOARD OF NEW ORLEANS**

December 31, 2019

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**BOARD OF DIRECTORS**

	MAYOR LATOYA CANTRELL, President	
	Dr. TAMIKA DUPLESSIS – President Pro -Tem	
JOSEPH PEYCHARD	ROBIN BARNES	RALPH JOHNSON
ALEJANDRA GUZMAN	JAY H. BANKS	LYNES SLOSS
JANET HOWARD	MAURICE G. SHOLAS, MD, PHD	VACANT, DISTRICT D

**BOARD OF TRUSTEES**

	MAYOR LATOYA CANTRELL, Chairperson	
	TAMIKA DUPLESSIS, President Pro -Tem	
ALEJANDRA GUZMANDR.	JAY H. BANKS	ROBIN BARNES
VACANT, DISTRICT D	RALPH JOHNSON	JOSEPH PEYCHARD
JANET HOWARD	MAURICE G. SHOLAS, MD, PHD	CHANTE' BIVENS
LYNES SLOSS	LATRESSIA MATTHEWS	CHRISTOPHER BERGERON
	HAROLD HELLER	

**AUDIT COMMITTEE**

	DR. TAMIKA DUPLESSIS, - Chairperson	
ROBIN BARNES	JOSEPH PEYCHARD	MAURICE G. SHOLAS, MD, PHD
	ALEJANDRA GUZMAN	

**FINANCE AND ADMINISTRATION COMMITTEE**

	LYNES SLOSS, – Chairperson	
JANET HOWARD	RALPH JOHNSON	JOSEPH PEYCHARD
	ALEJANDRA GUZMAN	

**GOVERNANCE COMMITTEE**

	RALPH JOHNSON, – Chairperson	
ROBIN BARNES	JANET HOWARD	JAY H. BANKS
	LYNES SLOSS	

**PENSION COMMITTEE**

	JOSEPH PEYCHARD – Chairperson	
JAY H. BANKS	RALPH JOHNSON	MAURICE G. SHOLAS, MD, PHD
ALEJANDRA GUZMAN	CHRISTOPHER BERGERON	LATRESSIA MATTHEWS
CHANTE BIVENS	HAROLD HELLER	

**STRATEGY COMMITTEE**

	ROBIN BARNES – Chairperson	
LYNES SLOSS	DR. TAMIKA DUPLESSIS	MAURICE G. SHOLAS, MD, PHD
	JANET HOWARD	

**OPERATIONS COMMITTEE**

	JANET HOWARD-Chairperson	
JAY H. BANKS	DR. TAMIKA DUPLESSIS	JOSEPH PEYCHARD
	MAURICE G. SHOLAS, MD, PHD	

**RUDD & WISDOM, ACTUARY**

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
EXECUTIVE STAFF**

**December 31, 2019**

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**EXECUTIVE DIRECTOR**

Ghassan Korban

**CHIEF OF STAFF**

Christy Harowski

**GENERAL SUPERINTENDENT- CONSTRUCTION/OPERATIONS**

Robert Turner

**CHIEF OF COMMUNICATIONS**

Richard Rainey

**CHIEF FINANCIAL OFFICER**

Yvette Downs

**CHIEF ADMINISTRATIVE OFFICER**

David Callahan

**SPECIAL COUNSEL**

Yolanda Grinstead

**CHIEF OF CUSTOMER SERVICE**

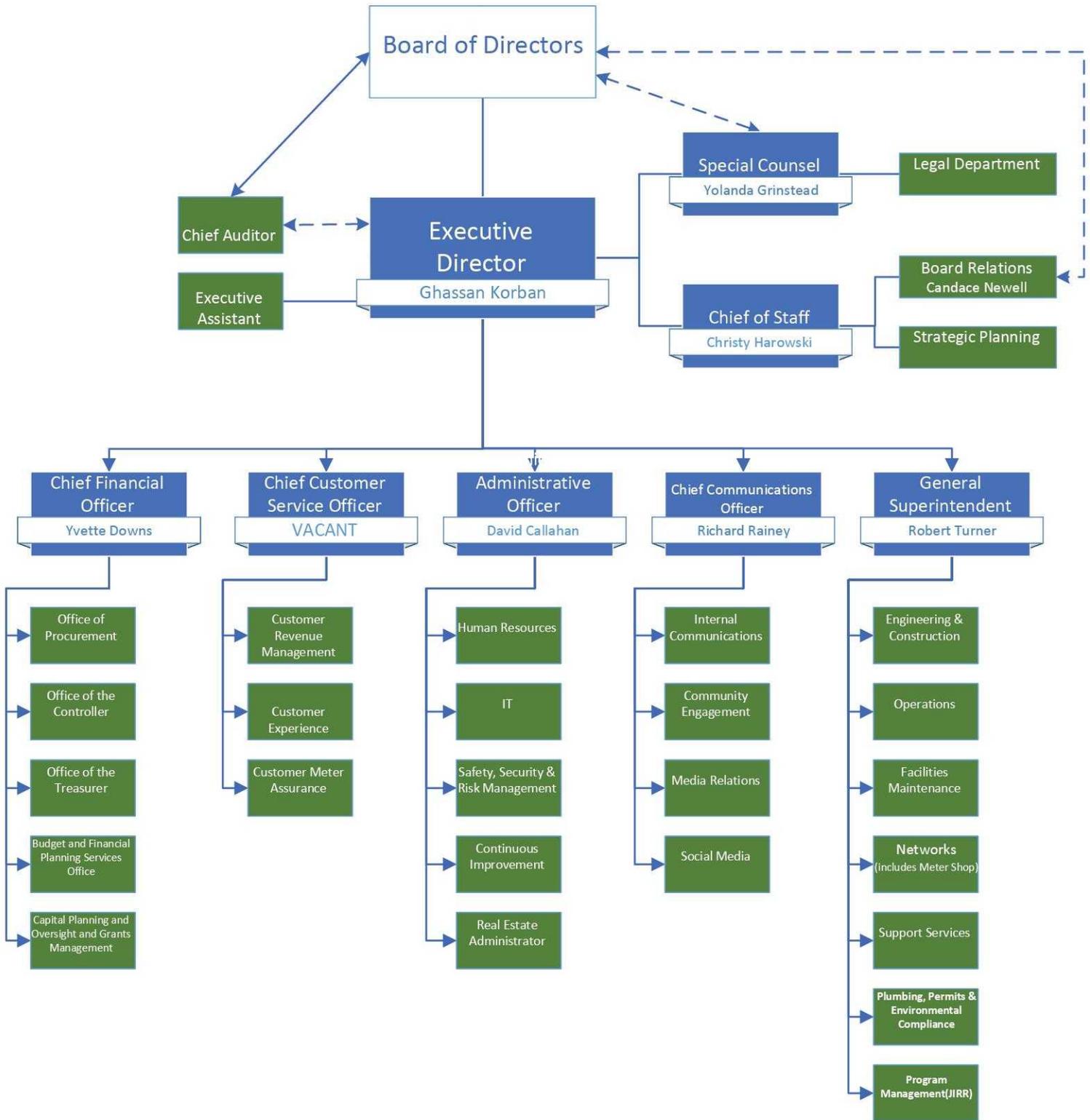
VACANT

**CHIEF AUDIT EXECUTIVE**

VACANT

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

Utility-Wide Organizational Chart



# FINANCIAL SECTION



**Our team works around the clock to make sure we continue to provide essential services. Here in Central Control, our employees are responsible for the delivery of an adequate supply of board- generated electrical power, the continuous monitoring of the operational status of all electrical switchgear and the testing of related electrical feeders and equipment.**

## **INDEPENDENT AUDITORS' REPORT**

Members of the Board of Directors  
Sewerage and Water Board of New Orleans

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

We have audited the accompanying financial statements of the Sewerage and Water Board of New Orleans (the "Board"), comprised of its business type activities and its fiduciary fund, as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the Board's basic financial statements as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

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

### **Auditors' Responsibility**

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America 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 from material misstatement.

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

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

## **Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the business-type activities and the fiduciary fund of the Board, as of December 31, 2019 and 2018, and the respective changes in financial position, and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## **Emphasis of Matters**

### *COVID-19*

As discussed in Note 20 to the financial statements, the Board was impacted by disruptions in the economy and business operations associated with the coronavirus (“COVID-19”) pandemic. Our opinion is not modified with respect to this matter.

### *Liquidity*

As discussed in Note 17 to the financial statements, the Board’s Drainage System has incurred significant increases in expenditures which has negatively impacted the liquidity of the Drainage System. Management’s evaluation of the events and conditions and management’s plans to mitigate those matters are also described in Note 17. Our opinion is not modified with respect to this matter.

## **Other Matters**

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management’s discussion and analysis on pages II-4 through II-21 and the schedules presented on pages II-75 through II-77 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 audits were conducted for the purpose of forming opinions on the financial statements that collectively comprise the Board’s basic financial statements. The Introductory section, Schedules 1 through 7, the Statistical Information section, and Supplementary Information section are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Schedules 1 through 7 are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic 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 schedules 1 through 7 are fairly stated, in all material respects, in relation to the financial statements as a whole.

The Introductory, Statistical, and Supplemental sections 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 August 18, 2020, on our consideration of the Board's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is 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 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 Board's internal control over financial reporting and compliance.

*Postlethwaite & Netterville*

New Orleans, Louisiana  
August 18, 2020

## **SEWERAGE & WATER BOARD OF NEW ORLEANS**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS YEARS ENDED DECEMBER 31, 2019 AND 2018**

The following Management Discussion and Analysis provides an overview of the financial performance of the Sewerage & Water Board of New Orleans' (the Board) for the fiscal years that ended December 31, 2019 and 2018. We encourage readers to consider the information presented here in conjunction with the additional information that we have furnished in our letter of transmittal. The Board's financial statements follow this section.

#### **FINANCIAL HIGHLIGHTS**

The Board adopted a financial plan for 2011 through 2020 that resulted in improved debt service coverage, increased funding for operations and maintenance, and full funding for the capital improvement programs. This financial plan was updated in 2016 to cover 2017 through 2020.

Recovery from Hurricane Katrina, the resulting flooding and an ongoing consent decree program continued to have significant impacts on operations and capital activities during 2019. Repairs and replacements to the water, sewerage, and drainage systems, and rehabilitation and replacement of buildings will continue through 2025.

On August 5, 2017, New Orleans experienced a significant storm event resulting in localized flooding. In response, an investment was made in the emergency repair and upgrade to various aspects of the drainage system that continued into 2018.

In May 2019, in an effort to replenish funding for the Board, Mayor LaToya Cantrell led the charge to obtain \$50 million in one-time funding to support various operations and capital needs of the Board. During 2019, the Board received \$28 million in one-time funding through the Fair Share program. In addition, the Mayor was able to secure ongoing funding under House Bills 522, 617 & 43 which is anticipated to result in \$20 million to \$26 million in recurring tax revenue.

Also in 2019, \$127,550 was borrowed on a \$10 million funding obtained through the Louisiana Clean Water State Revolving Fund, administered through the Louisiana Department of Environmental Quality (LDEQ) for critical sewer repairs.

## SEWERAGE & WATER BOARD OF NEW ORLEANS

### MANAGEMENT'S DISCUSSION AND ANALYSIS YEARS ENDED DECEMBER 31, 2019 AND 2018

#### Enterprise Fund

The major highlights in the Board's enterprise fund were as follows:

#### 2019

- The SWBNO's total assets and deferred outflows totaled \$3.6 billion in 2019 compared to \$3.5 billion in 2018, an increase of 2.1%, while net position totaled \$2.4 billion in 2019 compared to \$2.2 billion in 2018, an increase of 5.0%.
- Revenues from Water and Sewer services increased by approximately \$51.7 million from 2018 to 2019, to a total of approximately \$263.0 million for the year ended December 31, 2019.
- Total operating expenses increased in 2019 by \$3.3 million, or 1.1% compared to 2018.
- Total assets and deferred outflows increased \$72.6 million, or 2.1% from 2018 to 2019.
- For the year ended December 31, 2019, the Board had total outstanding senior lien municipal debt of \$405.1 million, which includes \$5.9 million in Drainage bonds, \$205.5 million in Sewer Revenue Bonds, and \$193.7 million in Water Revenue Bonds.
- The Board's additions to its major systems approximated \$173.8 million.
- The Southeast Louisiana (SELA) drainage system project, a major upgrade by the Corps of Engineers, resulted in additions of approximately \$47.8 million to work in progress during the year.
- Federal Emergency Management Agency (FEMA) Disaster Public Assistance grants revenues totaled approximately \$4.8 million and Hazard Mitigation grants totaled approximately \$15.4 million.

#### 2018

- The SWBNO's net position totaled \$3.5 billion in 2018, an increase of 3.7% compared to 2017.
- Revenues from Water and Sewer services increased by approximately \$3.4 million from 2017 to 2018, for a total of approximately \$211.2 million for the year ended December 31, 2018.
- Total operating expenses decreased in 2018 by \$20.1 million, or 6.4% compared to 2017.
- Total assets increased \$124.7 million, or 3.7% from 2017 to 2018.
- For the year ended December 31, 2018, the Board had total outstanding senior lien municipal debt of \$421.9 million, which includes \$7.7 million in Drainage bonds, \$216.9 million in Sewer Revenue Bonds, and \$197.3 million in Water Revenue Bonds.
- The Board's additions to its major systems approximated \$253.3 million.
- The Southeast Louisiana (SELA) drainage system project, a major upgrade by the Corps of Engineers, resulted in additions of approximately \$57.1 million to work in progress during the year.
- Federal Emergency Management Agency (FEMA) Disaster Public Assistance grants revenues totaled approximately \$13.0 million and Hazard Mitigation grants totaled approximately \$31.1 million.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

**Pension Trust Fund**

The major highlights in the Board's fiduciary fund were as follows:

**2019**

The net appreciation of the fair value of investments was \$32.7 million in 2019 compared to a net depreciation of \$8.5 million in 2018. The net position restricted for pension benefits increased by \$24.4 million during 2019 to \$239.7 million at December 31, 2019.

**2018**

The net depreciation of the fair value of investments was \$8.5 million in 2018 compared to a net appreciation of \$22.5 million in 2017. The net position restricted for pension benefits decreased by \$20.0 million during 2018 to \$215.3 million at December 31, 2018.

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## **SEWERAGE & WATER BOARD OF NEW ORLEANS**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS YEARS ENDED DECEMBER 31, 2019 AND 2018**

#### **OVERVIEW OF THE FINANCIAL STATEMENTS**

This financial report consists of five parts: management's discussion and analysis (this section), the financial statements, the notes to the financial statements, required supplementary information, and other supplementary information.

#### **Government-wide Financial Statements – Enterprise Fund**

The Board's principal activities of providing water, sewerage, and drainage services are accounted for in a single proprietary fund – the enterprise fund. Enterprise funds are used to report business activities. Since the enterprise fund is the Board's single activity, its financial statements are presented as the Board's government-wide financial statements.

The financial statements provide both long-term and short-term information about the Board's overall financial status. The financial statements also include notes that explain some of the information in the financial statements and provide more detailed data. The statements are followed by a section of required supplementary information and other supplementary information that further explain and support the information in the financial statements.

The Board's financial statements are prepared on an accrual basis in conformity with accounting principles generally accepted in the United States of America (GAAP) as applied to government units. Under this basis of accounting, revenues are recognized in the period in which they are earned, expenses are recognized in the period in which they are incurred, and depreciation of property, plant, and equipment is recognized in the Statements of Revenues, Expenses, and Changes in Net Position. All assets and liabilities associated with the operation of the Board are included in the Statements of Net Position.

The Statement of Net Position presents financial information on all of the Board's assets, liabilities, and deferred inflows/outflows of resources, with the difference reported as net position. Over time, increases and decreases in net position may serve as a useful indicator of whether the financial position of the Board is improving or deteriorating.

#### **Fund Financial Statements – Pension Trust Fund**

The Board's fiduciary fund financial statements consist of its pension trust fund. As a fiduciary fund, the pension trust fund is held for the benefit of employees and retirees of the Board. The pension trust fund is not reflected in the government-wide financials because the resources are not available to the Board for its activities. The accounting for the pension trust fund is much like that used by the enterprise fund.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

**FINANCIAL ANALYSIS OF THE BOARD**

**ENTERPRISE FUND**

**2019 Net Position**

The Board's total assets and deferred outflows at December 31, 2019 were approximately \$3.6 billion, a 2.1% increase from December 31, 2018 (see Table A-1).

<b>Table A-1</b>				
<b>Sewerage &amp; Water Board of New Orleans</b>				
<b>Net Position</b>				
	<b>2019</b>	<b>2018</b>	<b>Increase (Decrease)</b>	<b>Increase (Decrease)</b>
Current unrestricted assets	\$ 129,867,392	\$ 150,478,786	\$ (20,611,394)	-13.7%
Restricted assets	49,943,476	69,484,786	(19,541,310)	-28.1%
Property, plant, and equipment - net	3,318,295,115	3,208,862,077	109,433,038	3.4%
Other assets	12,845,142	7,478,739	5,366,403	71.8%
<b>Total assets</b>	<b>3,510,951,125</b>	<b>3,436,304,388</b>	<b>74,646,737</b>	<b>2.2%</b>
Deferred outflows of resources	46,121,097	48,123,085	(2,001,988)	-4.2%
<b>Total deferred outflows of resources</b>	<b>46,121,097</b>	<b>48,123,085</b>	<b>(2,001,988)</b>	<b>-4.2%</b>
<b>Total assets and deferred outflows</b>	<b>\$ 3,557,072,222</b>	<b>\$ 3,484,427,473</b>	<b>\$ 72,644,749</b>	<b>2.1%</b>
Current liabilities	\$ 114,879,776	\$ 167,662,980	\$ (52,783,204)	-31.5%
Long-term liabilities	1,070,754,335	1,054,308,552	16,445,783	1.6%
<b>Total liabilities</b>	<b>1,185,634,111</b>	<b>1,221,971,532</b>	<b>(36,337,421)</b>	<b>-3.0%</b>
Deferred inflows of resources	15,170,059	17,653,950	(2,483,891)	-14.1%
<b>Total deferred inflows of resources</b>	<b>15,170,059</b>	<b>17,653,950</b>	<b>(2,483,891)</b>	<b>-14.1%</b>
Net position:				
Net investment in capital assets	2,631,802,752	2,543,371,049	88,431,703	3.5%
Restricted	43,839,618	46,042,585	(2,202,967)	-4.8%
Unrestricted	(319,374,318)	(344,611,643)	25,237,325	-7.3%
<b>Total net position</b>	<b>2,356,268,052</b>	<b>2,244,801,991</b>	<b>111,466,061</b>	<b>5.0%</b>
<b>Total liabilities, deferred inflows, and net position</b>	<b>\$ 3,557,072,222</b>	<b>\$ 3,484,427,473</b>	<b>\$ 72,644,749</b>	<b>2.1%</b>

The increase in total assets and deferred outflows of \$72.6 million resulted primarily due to a net increase in property, plant, and equipment of \$109.4 million. There was a decrease in restricted assets of about \$19.5 million as funds were used for construction projects. Current unrestricted assets decreased by \$20.6 million in 2019 mainly due to a decrease in outstanding customers receivable balance, net of related allowance, of \$6.3 million and a decrease in grants receivable of \$9.8 million.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

Current liabilities decreased by \$52.8 million primarily due to a decrease in accounts payable of \$33.1 million, an \$11.2 million decrease in the disaster reimbursement revolving loan fund, and more timely payments to vendors. Long-term liabilities increased by \$16.4 million primarily due to an increase of \$36.1 million in total other post-employment benefits liability (total OPEB liability), offset by a decrease in net pension liability of \$18.8 million due to changes in actuarial assumption and investment returns, and decreases in other long term liabilities. Deferred outflows of resources and deferred inflows of resources decreased by \$2.0 million and \$2.5 million, respectively, due to changes in the actuary's assumptions on investment returns and demographic factors related to the pension and OPEB liabilities.

**2018 Net Position**

The Board's total assets and deferred outflows at December 31, 2018 were approximately \$3.5 billion, a 3.7% increase from December 31, 2017 (see Table A-2).

	<b>2018</b>		<b>2017</b>	<b>Increase (Decrease)</b>	<b>Increase (Decrease)</b>
Current unrestricted assets	\$ 150,478,786	\$	194,955,962	\$ (44,477,176)	-22.8%
Restricted assets	69,484,786		116,611,194	(47,126,408)	-40.4%
Property, plant, and equipment - net	3,208,862,077		3,019,092,797	189,769,280	6.3%
Other assets	7,478,739		12,291,080	(4,812,341)	-39.2%
<b>Total assets</b>	<b>3,436,304,388</b>		<b>3,342,951,033</b>	<b>93,353,355</b>	<b>2.8%</b>
Deferred outflows of resources	48,123,085		16,734,173	31,388,912	187.6%
<b>Total deferred outflows of resources</b>	<b>48,123,085</b>		<b>16,734,173</b>	<b>31,388,912</b>	<b>187.6%</b>
<b>Total assets and deferred outflows</b>	<b>\$ 3,484,427,473</b>	\$	<b>3,359,685,206</b>	<b>\$ 124,742,267</b>	<b>3.7%</b>
Current liabilities	\$ 167,662,980	\$	148,037,878	\$ 19,625,102	13.3%
Long-term liabilities	1,054,308,552		1,040,787,916	13,520,636	1.3%
<b>Total liabilities</b>	<b>1,221,971,532</b>		<b>1,188,825,794</b>	<b>33,145,738</b>	<b>2.8%</b>
Deferred inflows of resources	17,653,950		1,867,968	15,785,982	845.1%
<b>Total deferred inflows of resources</b>	<b>17,653,950</b>		<b>1,867,968</b>	<b>15,785,982</b>	<b>845.1%</b>
Net position:					
Net investment in capital assets	2,543,371,049		2,405,347,069	138,023,980	5.7%
Restricted	46,042,585		46,606,340	(563,755)	-1.2%
Unrestricted	(344,611,643)		(282,961,965)	(61,649,678)	21.8%
<b>Total net position</b>	<b>2,244,801,991</b>		<b>2,168,991,444</b>	<b>75,810,547</b>	<b>3.5%</b>
<b>Total liabilities, deferred inflows, and net position</b>	<b>\$ 3,484,427,473</b>	\$	<b>3,359,685,206</b>	<b>\$ 124,742,267</b>	<b>3.7%</b>

## SEWERAGE & WATER BOARD OF NEW ORLEANS

### MANAGEMENT'S DISCUSSION AND ANALYSIS YEARS ENDED DECEMBER 31, 2019 AND 2018

The net increase in total assets of \$124.7 million resulted primarily due to a net increase in property, plant, and equipment of \$189.8 million. There was a decrease in restricted assets of about \$47.1 million as funds were used for construction projects. Current unrestricted assets decreased by \$44.5 million in 2018 mainly due to a decrease in unrestricted cash and cash equivalents of \$18.4 million and a decrease in grants receivable of \$37.5 million, offset by an increase in outstanding customers receivable balance, net of related allowance, of \$9.1 million.

Current liabilities increase by \$19.6 million primarily due to an increase in Accounts Payable of \$16.1 million as a result of increased capital expenditures during 2018 and timing of payments. Long-term liabilities increased by \$13.5 million primarily due to an increase in net pension liability of \$40.9 million due to changes in actuarial assumption and investment returns, offset by a decrease of \$19.0 million decrease in total other post-employment benefits liability (Total OPEB Liability) and a decrease of \$19.5 million in total outstanding bonds. Deferred outflows of resources and deferred inflows of resources increased by \$31.4 million and \$15.8 million, respectively, due to changes in actuary's assumption on investment returns and demographic factors related to the pension plan.

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**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

**2019 Changes in Net Position**

The change in net position for the year ended December 31, 2019 was an increase of approximately \$111.5 million, as opposed to approximately \$75.8 million for the year ended December 31, 2018. The Board's total operating revenues increased by 24.5% to approximately \$263.0 million due primarily to improved customer billing and rate increases effective January 1, 2019. Total non-operating revenue (expenses) increased by 46.2% to approximately \$86.4 million due primarily to \$28 million in one-time funding from the Fair Share program and approximately \$7.1 million from the revolving loan fund, offset by a \$10.4 change in the provision for grants deemed uncollectible. Capital contributions from federal grants and construction of Board property was approximately \$60.3 million resulting primarily from capital additions reimbursable under the FEMA Disaster Public Assistance and FEMA Hazard Mitigation grants of approximately \$7 million and \$15.4 million, respectively, approximately \$24.6 million of capital contributions from the Army Corps of Engineers, and approximately \$11.2 million of forgiveness of the Revolver account liability. The changes in net position are detailed in Table A-3; operating expenses are detailed in Table A-4.

	<b>2019</b>	<b>2018</b>	<b>Increase (Decrease)</b>	<b>Increase (Decrease)</b>
Operating revenues:				
Sales of water and delinquent fees	\$ 113,339,213	\$ 90,287,081	\$ 23,052,132	25.5%
Sewerage service charges	143,686,137	114,614,157	29,071,980	25.4%
Plumbing inspection and license fees	582,056	648,332	(66,276)	-10.2%
Other revenue	5,351,115	5,687,203	(336,088)	-5.9%
<b>Total operating revenues</b>	<b>262,958,521</b>	<b>211,236,773</b>	<b>51,721,748</b>	<b>24.5%</b>
Operating expenses (Table A-4)	298,150,127	294,807,252	3,342,875	1.1%
Operating loss	(35,191,606)	(83,570,479)	48,378,873	57.9%
Non-operating revenues (expenses):				
Property taxes	55,888,326	54,651,624	1,236,702	2.3%
Other taxes	594,985	594,532	453	0.1%
Contributions from other local governments	35,839,141	-	35,839,141	N/A
Federal noncapital grants	48,716	78,814	(30,098)	-38.2%
Interest income	1,610,012	833,128	776,884	93.2%
Interest expense	(228,235)	(248,469)	20,234	-8.1%
Bond issuance costs	(127,550)	-	(127,550)	N/A
Recovery (provision) for grants	(7,230,828)	3,183,641	(10,414,469)	-327.1%
<b>Total non-operating revenues (expenses)</b>	<b>86,394,567</b>	<b>59,093,270</b>	<b>27,301,297</b>	<b>46.2%</b>
Income before capital contributions	51,202,961	(24,477,209)	75,680,170	-309.2%
Capital contributions	60,263,100	100,287,756	(40,024,656)	-39.9%
<b>Change in net position</b>	<b>111,466,061</b>	<b>75,810,547</b>	<b>35,655,514</b>	<b>47.0%</b>
Net position, beginning of year	2,244,801,991	2,168,991,444	75,810,547	3.5%
Net position, end of year	\$ 2,356,268,052	\$ 2,244,801,991	\$ 111,466,061	5.0%

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

<b>Table A-4</b>					
<b>Sewerage &amp; Water Board of New Orleans</b>					
<b>Operating Expenses</b>					
	<b>2019</b>		<b>2018</b>	<b>Increase (Decrease)</b>	<b>Increase (Decrease)</b>
Power and pumping	\$ 20,013,016		\$ 31,874,462	\$ (11,861,446)	-37.2%
Treatment	19,688,222		22,958,975	(3,270,753)	-14.2%
Transmission and distribution	38,176,467		46,530,018	(8,353,551)	-18.0%
Customer accounts	5,431,786		5,243,276	188,510	3.6%
Customer service	5,304,138		4,476,414	827,724	18.5%
Administration and general	29,023,557		28,253,318	770,239	2.7%
Payroll related	53,838,316		49,416,581	4,421,735	8.9%
Maintenance of general plant	27,142,840		28,813,485	(1,670,645)	-5.8%
Depreciation	64,156,230		63,501,190	655,040	1.0%
Provision for doubtful accounts	33,306,195		20,942,217	12,363,978	59.0%
(Recovery) provision for claims	2,069,360		(7,202,684)	9,272,044	-128.7%
<b>Total operating expenses</b>	<b>\$ 298,150,127</b>		<b>\$ 294,807,252</b>	<b>\$ 3,342,875</b>	<b>1.1%</b>

Total operating expenses increased by approximately \$3.3 million or 1.1% compared to 2018. The increase of \$12.4 million in provision for doubtful accounts was mainly due to customer collection issues in 2019, and the \$9.3 million increase in the provision for claims was mainly attributable to the impact of the 2018 revised reserve for general liabilities claims. In addition, transmission and distribution decreased by \$8.4 million, or 18% due to the Board having limited resources available for non-FEMA funded repairs and maintenance expenditures on the water, sewer, and drainage systems. Furthermore, payroll related expenses increased by approximately \$4.4 million or 8.9% due to an increase in total number of employees from approximately 1,400 at December 31, 2018 to approximately 1,500 at December 31, 2019.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

**2018 Changes in Net Position**

The change in net position for the year ended December 31, 2018 was an increase of approximately \$75.8 million, as opposed to approximately \$34.8 million for the year ended December 31, 2017. The Board's total operating revenues increased by 2.8% to approximately \$211.2 million due primarily to rate increases effective January 1, 2018. Total non-operating revenue increased by 23.5% to approximately \$59.1 million due to a recovery of \$3.2 million in grants previously determined to be uncollectable. Capital contributions from federal grants and construction of Board property was approximately \$100.3 million resulting primarily from capital additions reimbursable under the FEMA Disaster Public Assistance and FEMA Hazard Mitigation grants of approximately \$13.0 million and \$31.1 million, respectively, and approximately \$56.2 million of capital contributions by the Army Corps of Engineers. The changes in net position are detailed in Table A-5; operating expenses are detailed in Table A-6.

<b>Table A-5</b>				
<b>Sewerage &amp; Water Board of New Orleans</b>				
<b>Revenues , Expenses and Change in Net Position</b>				
	<b>2018</b>	<b>2017</b>	<b>Increase (Decrease)</b>	<b>Increase (Decrease)</b>
Operating revenues:				
Sales of water and delinquent fees	\$ 90,287,081	\$ 90,464,810	\$ (177,729)	-0.2%
Sewerage service charges	114,614,157	111,063,719	3,550,438	3.2%
Plumbing inspection and license fees	648,332	588,330	60,002	10.2%
Other revenue	5,687,203	3,451,274	2,235,929	64.8%
<b>Total operating revenues</b>	<b>211,236,773</b>	<b>205,568,133</b>	<b>5,668,640</b>	<b>2.8%</b>
Operating expenses (Table A-6)	294,807,252	314,911,503	(20,104,251)	-6.4%
Operating loss	(83,570,479)	(109,343,370)	25,772,891	23.6%
Non-operating revenues (expenses):				
Property taxes	54,651,624	55,422,813	(771,189)	-1.4%
Other taxes	594,532	593,424	1,108	0.2%
Federal noncapital grants	78,814	4,139	74,675	1804.2%
Interest income	833,128	786,643	46,485	5.9%
Interest expense	(248,469)	(50,158)	(198,311)	395.4%
Provision for grants	3,183,641	(8,906,949)	12,090,590	-135.7%
<b>Total non-operating revenues (expenses)</b>	<b>59,093,270</b>	<b>47,849,912</b>	<b>11,243,358</b>	<b>23.5%</b>
Income before capital contributions	(24,477,209)	(61,493,458)	37,016,249	-60.2%
Capital contributions	100,287,756	96,336,075	3,951,681	4.1%
<b>Change in net position</b>	<b>75,810,547</b>	<b>34,842,617</b>	<b>40,967,930</b>	<b>117.6%</b>
Net position, beginning of year	2,168,991,444	2,228,421,948	(59,430,504)	-2.7%
Change in accounting principle	-	(94,273,121)	94,273,121	N/A
Net position, end of year	\$ 2,244,801,991	\$ 2,168,991,444	\$ 75,810,547	3.5%

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

Table A-6				
Sewerage & Water Board of New Orleans				
Operating Expenses				
	2018	2017	Increase (Decrease)	Increase (Decrease)
Power and pumping	\$ 31,874,462	\$ 36,552,523	\$ (4,678,061)	-12.8%
Treatment	22,958,975	25,651,907	(2,692,932)	-10.5%
Transmission and distribution	46,530,018	36,409,559	10,120,459	27.8%
Customer accounts	5,243,276	4,460,155	783,121	17.6%
Customer service	4,476,414	4,217,543	258,871	6.1%
Administration and general	28,253,318	24,343,704	3,909,614	16.1%
Payroll related	49,416,581	38,126,322	11,290,259	29.6%
Maintenance of general plant	28,813,485	26,100,182	2,713,303	10.4%
Depreciation	63,501,190	59,450,076	4,051,114	6.8%
Provision for doubtful accounts	20,942,217	14,326,711	6,615,506	46.2%
Provision for claims	(7,202,684)	45,272,821	(52,475,505)	-115.9%
<b>Total operating expenses</b>	<b>\$ 294,807,252</b>	<b>\$ 314,911,503</b>	<b>\$ (20,104,251)</b>	<b>-6.4%</b>

Total operating expenses decreased by approximately \$20.1 million or 6.4% compared to 2017. The increase of \$6.6 million in provision for doubtful accounts was mainly due to customer billing and collection issues in 2018, and a recovery in claims was mainly attributable to a \$11.0 million decrease in general liabilities claims in 2018 as the reserve for SELA project related claims was revised based on the final judgments during 2018. In addition, transmission and distributions increased by \$10.1 million due to repairs and maintenance expenditures on the water, sewer, and drainage systems. Furthermore, payroll related expenses increased by approximately \$11.3 million or 29.6% due to an increase in total number of employees from approximately 1,200 at December 31, 2017 to approximately 1,400 at December 31, 2018.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

**PENSION TRUST FUND**

**2019 Plan Net Position**

The Board's total plan assets and net position of its pension trust fund at December 31, 2019 were approximately \$240.9 million and \$239.7 million, respectively, representing a 10.9% and 11.3% increase, respectively, from December 31, 2018 (see table A-7).

Plan net position increased by approximately \$24.4 million in 2019 primarily due to net appreciation in fair value of investments by approximately \$32.7 million. An increase of employee and employer contributions of \$2.4 million was offset by an increase of benefit payments of approximately \$1.9 million in 2019.

<b>Table A-7</b>				
<b>Sewerage &amp; Water Board of New Orleans</b>				
<b>Pension Trust Fund Net Position</b>				
	<b>2019</b>	<b>2018</b>	<b>Increase (Decrease)</b>	<b>Increase (Decrease)</b>
Cash	\$ 442,289	\$ 1,456	\$ 440,833	30277.0%
Investments	239,630,727	217,136,196	22,494,531	10.4%
Receivables	438,942	63,354	375,588	592.8%
Due from other fund	343,344	73,777	269,567	365.4%
<b>Total assets</b>	<b>240,855,302</b>	<b>217,274,783</b>	<b>23,580,519</b>	<b>10.9%</b>
Other liabilities	1,177,600	1,995,000	(817,400)	N/A
<b>Total liabilities</b>	<b>1,177,600</b>	<b>1,995,000</b>	<b>(817,400)</b>	<b>100.0%</b>
<b>Plan net position</b>	<b>\$ 239,677,702</b>	<b>\$ 215,279,783</b>	<b>\$ 24,397,919</b>	<b>11.3%</b>

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

**2018 Plan Net Position**

The Board's total plan assets and net position of its pension trust fund at December 31, 2018 was approximately \$215.3 million, an 8.5% decrease from December 31, 2017 (see table A-8).

Plan net position decreased by approximately \$20.0 million in 2018 primarily due to net depreciation in fair value of investments by approximately \$8.5 million. An increase of employee and employer contributions of \$0.6 million was offset by an increase of benefit payments of approximately \$1.6 million in 2018.

<b>Table A-8</b>				
<b>Sewerage &amp; Water Board of New Orleans</b>				
<b>Pension Trust Fund Net Position</b>				
	<b>2018</b>	<b>2017</b>	<b>Increase (Decrease)</b>	<b>Increase (Decrease)</b>
Cash	\$ 1,456	\$ 230,946	\$ (229,490)	-99.4%
Investments	217,136,196	234,711,857	(17,575,661)	-7.5%
Receivables	63,354	101,269	(37,915)	-37.4%
Due from other fund	73,777	240,245	(166,468)	-69.3%
<b>Total assets</b>	<b>217,274,783</b>	<b>235,284,317</b>	<b>(18,009,534)</b>	<b>-7.7%</b>
Other liabilities	1,995,000	-	1,995,000	N/A
<b>Total liabilities</b>	<b>1,995,000</b>	<b>-</b>	<b>1,995,000</b>	<b>0.0%</b>
<b>Plan net position</b>	<b>\$ 215,279,783</b>	<b>\$ 235,284,317</b>	<b>\$ (20,004,534)</b>	<b>-8.5%</b>

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

**2019 Changes in Plan Net Position**

Change in net position increased by \$44.4 million mainly attributable to a \$41.5 million net investment (loss) income change. The increase in net investment income in 2019 is due to stock market performance causing appreciation in fair value of the equity investments that account for approximately half of the investment portfolio of the pension trust fund.

<b>Table A-9</b>				
<b>Sewerage &amp; Water Board of New Orleans</b>				
<b>Change in Plan Net Position</b>				
	<b>2019</b>	<b>2018</b>	<b>Increase (Decrease)</b>	<b>Increase (Decrease)</b>
<b>Additions:</b>				
Contributions	\$ 13,596,270	\$ 11,186,923	\$ 2,409,347	21.5%
Net income (loss) on investments	33,662,791	(7,868,279)	41,531,070	-527.8%
<b>Total additions</b>	<b>47,259,061</b>	<b>3,318,644</b>	<b>43,940,417</b>	<b>1324.0%</b>
<b>Deductions:</b>				
Benefits	(20,438,403)	(18,565,085)	(1,873,318)	10.1%
Employee refunds	(481,801)	(355,206)	(126,595)	35.6%
Employee DROP contributions	(1,940,938)	(4,402,887)	2,461,949	-55.9%
<b>Total deductions</b>	<b>(22,861,142)</b>	<b>(23,323,178)</b>	<b>462,036</b>	<b>-2.0%</b>
<b>Change in net position</b>	<b>24,397,919</b>	<b>(20,004,534)</b>	<b>44,402,453</b>	<b>-222.0%</b>
Plan net position, beginning of year	215,279,783	235,284,317	(20,004,534)	-8.5%
Plan net position, end of year	<b>\$ 239,677,702</b>	<b>\$ 215,279,783</b>	<b>\$ 24,397,919</b>	<b>11.3%</b>

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**MANAGEMENT'S DISCUSSION AND ANALYSIS  
YEARS ENDED DECEMBER 31, 2019 AND 2018**

**2018 Changes in Plan Net Position**

Change in net position decreased by \$31.0 million mainly attributable to a \$31.2 million net investment (loss) income change. The decrease in net investment income in 2018 is due stock market performance near the end of 2018 causing depreciation in fair value of the equity investments that account for approximately half of the investment portfolio of the pension trust fund.

Table A-10				
Sewerage & Water Board of New Orleans				
Change in Plan Net Position				
	2018	2017	Increase (Decrease)	Increase (Decrease)
Additions:				
Contributions	\$ 11,186,923	\$ 11,795,214	\$ (608,291)	-5.2%
Net income on investments	(7,868,279)	23,326,273	(31,194,552)	-133.7%
<b>Total additions</b>	<b>3,318,644</b>	<b>35,121,487</b>	<b>(31,802,843)</b>	<b>-90.6%</b>
Deductions:				
Benefits	(18,565,085)	(16,974,995)	(1,590,090)	9.4%
Employee refunds	(355,206)	(438,134)	82,928	-18.9%
Employee DROP contributions	(4,402,887)	(6,780,302)	2,377,415	-35.1%
<b>Total deductions</b>	<b>(23,323,178)</b>	<b>(24,193,431)</b>	<b>870,253</b>	<b>-3.6%</b>
<b>Change in net position</b>	<b>(20,004,534)</b>	<b>10,928,056</b>	<b>(30,932,590)</b>	<b>-283.1%</b>
Plan net position, beginning of year	235,284,317	224,356,261	10,928,056	4.9%
Plan net position, end of year	<u>\$ 215,279,783</u>	<u>\$ 235,284,317</u>	<u>\$ (20,004,534)</u>	<u>-8.5%</u>

## SEWERAGE & WATER BOARD OF NEW ORLEANS

### MANAGEMENT'S DISCUSSION AND ANALYSIS YEARS ENDED DECEMBER 31, 2019 AND 2018

#### CAPITAL ASSET AND DEBT ADMINISTRATION

##### 2019 Capital Assets

As of December 31, 2019, the Board had invested approximately \$4.42 billion in capital assets. Net of accumulated depreciation, the Board's net capital assets at December 31, 2019 totaled approximately \$3.32 billion. This amount represents a net increase (including additions and disposals, net of depreciation) of approximately \$109.4 million, or 3.4%, over December 31, 2018.

At December 31, 2019, the Board's budget for its ten-year capital improvements program totaled approximately \$3.0 billion, compared to approximately \$3 billion in 2018. The capital improvements program includes \$325 million in capital expenditures for the year ending December 31, 2020 and provides for the following activities:

- Continue Joint Infrastructure Recovery Road in conjunction with City of New Orleans Department of Public Works;
- Comply with regulatory requirements under the Sewer Consent Decree;
- Complete rehabilitation of Claiborne Pumping Station (Phase II) of Water Hammer project;
- Participate in drainage system improvements in coordination with SELA Program;
- Initiate Automated Meter Infrastructure project.

Due to certain regulatory and legislative changes, additional capital improvements will probably be required. Future capital improvement program expenditures may require the issuance of additional debt depending on the amount and timing of expenditures.

See Note 4 for detailed capital asset activity during 2019.

## SEWERAGE & WATER BOARD OF NEW ORLEANS

### MANAGEMENT'S DISCUSSION AND ANALYSIS YEARS ENDED DECEMBER 31, 2019 AND 2018

#### 2018 Capital Assets

As of December 31, 2018, the Board had invested approximately \$4.24 billion in capital assets. Net of accumulated depreciation, the Board's net capital assets at December 31, 2018 totaled approximately \$3.21 billion. This amount represents a net increase (including additions and disposals, net of depreciation) of approximately \$192.3 million, or 6.4%, over December 31, 2017.

At December 31, 2018, the Board's budget for its ten-year capital improvements program totaled approximately \$3 billion, which includes \$166.7 million in capital expenditures for the year ending December 31, 2019 and provides for the following activities:

- Continue Joint Infrastructure Recovery Road in conjunction with City of New Orleans Department of Public Works;
- Comply with regulatory requirements under the Sewer Consent Decree;
- Complete second tower of Water Hammer project;
- Participate in drainage system improvements in coordination with SELA Program;
- Initiate Automated Meter Infrastructure project.

Due to certain regulatory and legislative changes, additional capital improvements will probably be required. Future capital improvement program expenditures may require the issuance of additional debt depending on the amount and timing of expenditures.

#### 2019 Debt Administration

The Board continues to make its regularly scheduled payments on its bonds. During 2019, \$16.9 million in principal payments were made.

The Louisiana Department of Environmental Quality has loaned the Board up to \$9.0 million to fund construction of sewerage treatment works, implementing a management program under Section 1329 of the Water Quality Act of 1987, and developing and implementing a conservation and management plan under Section 1330 of the Federal Act. The outstanding balance is \$6.0 million at December 31, 2019.

The Coastal Protection and Restoration Authority of Louisiana entered into an agreement with the Department of the Army for the Southeast Louisiana Flood Control Program. The United States Government has committed to 65% of the project costs and The Board is responsible for 35% of the project costs. At December 31, 2019, the accumulated amount due to the U.S. Government totaled approximately \$250.3 million. This amount is estimated based on the actual cost of construction incurred to date. Repayment of principal and interest is expected to start in 2020 and continued through 2051. Total payment for the project is estimated to be approximately \$250.3 million through 2051. The total cost of the project may increase in the upcoming years as additional construction costs continue to add to the project.

The City entered into an agreement with the Louisiana Department of Environmental Quality (LDEQ) whereby the LDEQ has committed to loan the Board \$10 million to fund certain sewer main replacements and repairs. The loan is to be advanced in incremental amounts as project costs are incurred. Semi-annual interest and administrative fee payments begin in 2020. Annual principal payments are due beginning in 2021 and continuing through 2040. At December 31, 2019, the outstanding balance is \$127,550. See Note 6 for detailed long term debt activity during 2019.

## **SEWERAGE & WATER BOARD OF NEW ORLEANS**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS YEARS ENDED DECEMBER 31, 2019 AND 2018**

#### **2018 Debt Administration**

The Board continues to make its regularly scheduled payments on its bonds. During 2018, \$17.5 million in principal payments were made.

The Louisiana Department of Environmental Quality has loaned the Board up to \$9.0 million to fund construction of sewerage treatment works, implementing a management program under Section 1329 of the Water Quality Act of 1987, and developing and implementing a conservation and management plan under Section 1330 of the Federal Act. The outstanding balance is \$6.5 million at December 31, 2018.

The Costal Protection and Restoration Authority of Louisiana entered into an agreement with the Department of the Army for the Southeast Louisiana Flood Control Program. The United States Government has committed to 65% of the project costs and The Board is responsible for 35% of the project costs. At December 31, 2018, the accumulated amount due to the U.S. Government totaled approximately \$227.1 million. This amount is estimated based on the actual cost of construction incurred to date. Repayment of principal and interest is expected to start in 2019 through 2050. Total payment for the project is estimated to be approximately \$227.1 million through 2050. The total cost of the project may increase in the upcoming years as additional construction costs continue to add to the project. See Note 6 for detailed long term debt activity during 2018.

#### **ECONOMIC FACTORS AND RATES**

The Board, the City Council, and the Board of Liquidation City Debt approved a rate increase of ten percent for the Water and Sewer Departments effective January 1, 2013 and annually thereafter through 2020.

To meet the bond covenant for the 2014 Water and Sewer Revenue and Refunding Bonds and 2015 Water and Sewer Revenue Bonds, the cash in days is required to be maintained 90 days. The SWBNO has exceeded the goals by 57 days and 62 days in the Water and Sewer system, respectively.

The total number of open accounts continue to increase modestly on an annual basis. The total open accounts in 2019 were 136,616, an increase of 648 over 2018 open accounts of 135,968.

#### **CONTACTING THE BOARD'S FINANCIAL MANAGEMENT**

This financial report is designed to provide our bondholders, patrons, and other interested parties with a general overview of the Board's finances and to demonstrate the Board's accountability for the money it receives. If you have questions about this report or need additional financial information, contact the Sewerage & Water Board of New Orleans at (504) 585-2364.

## **BASIC FINANCIAL STATEMENTS**

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**STATEMENTS OF NET POSITION**  
**December 31, 2019 and 2018**

ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	2019	2018
Current assets:		
Cash and cash equivalents	\$ 62,262,464	\$ 63,639,346
Accounts receivable:		
Customers, net of allowance	34,055,759	40,383,662
Taxes	5,089,136	6,493,108
Grants	16,969,639	26,810,346
Miscellaneous	5,782,798	5,731,443
Due from pension trust fund	-	1,995,000
Inventory of supplies	5,136,999	4,888,702
Prepaid expenses	570,597	537,179
Total unrestricted and undesignated	129,867,392	150,478,786
 Total current assets	 129,867,392	 150,478,786
Noncurrent assets:		
Restricted cash, cash equivalents, and investments:		
Cash and cash equivalents restricted for capital projects	4,216,858	21,245,567
Debt service reserve	43,839,618	46,042,585
Health insurance reserve	1,887,000	2,196,634
Total restricted cash, cash equivalents, and investments	49,943,476	69,484,786
 Property, plant and equipment	 4,415,243,859	 4,243,049,265
Less: accumulated depreciation	1,096,948,744	1,034,187,188
Property, plant and equipment, net	3,318,295,115	3,208,862,077
Other assets:		
Funds from/for customer deposits	12,793,827	7,427,424
Deposits	51,315	51,315
Total other assets	12,845,142	7,478,739
 Total noncurrent assets	 3,381,083,733	 3,285,825,602
 Total assets	 3,510,951,125	 3,436,304,388
Deferred outflows of resources:		
Deferred amounts related to net pension liability	18,705,321	45,197,190
Deferred amounts related to total OPEB liability	24,816,033	-
Deferred loss on bond refunding	2,599,743	2,925,895
Total deferred outflows of resources	46,121,097	48,123,085
 Total assets and deferred outflows of resources	 \$ 3,557,072,222	 \$ 3,484,427,473

(Continued)

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**STATEMENTS OF NET POSITION**  
**December 31, 2019 and 2018**  
**(Continued)**

LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND NET POSITION	2019	2018
Current liabilities (payable from current unrestricted assets):		
Accounts payable	\$ 67,703,492	\$ 100,761,801
Due to City of New Orleans	710,554	842,664
Disaster Reimbursement Revolving Loan (Note 15)	-	11,221,710
Retainers and estimates payable	3,518,946	10,345,723
Due to pension trust fund	343,344	73,777
Accrued salaries	2,185,282	993,023
Claims payable	3,624,675	4,354,711
Total OPEB liability, due within one year	7,515,809	7,043,121
Debt Service Assistance Fund loan payable	2,650,800	5,067,022
Advances from federal government	4,655,507	4,751,868
Other liabilities	852,175	510,058
	93,760,584	145,965,478
Current liabilities (payable from current restricted assets):		
Accrued interest	2,550,699	2,725,236
Bonds payable	17,819,000	16,900,000
Retainers and estimates payable	749,493	2,072,266
	21,119,192	21,697,502
Total current liabilities (payable from current restricted assets):	21,119,192	21,697,502
Total current liabilities	114,879,776	167,662,980
Long-term liabilities:		
Claims payable, net of current portion	43,209,163	44,068,031
Accrued vacation and sick pay	9,068,334	9,693,790
Net pension liability	105,041,418	123,873,465
Total OPEB liability, net of current portion	187,712,285	151,569,144
Bonds payable, net of current maturities	422,546,351	442,697,050
Southeast Louisiana Project liability	250,343,870	227,139,545
Debt Service Assistance Fund loan payable, net of current maturities	40,039,087	42,689,887
Customer deposits	12,793,827	12,577,640
	1,070,754,335	1,054,308,552
Total long-term liabilities	1,070,754,335	1,054,308,552
Total liabilities	1,185,634,111	1,221,971,532
Deferred inflows of resources:		
Deferred amounts related to net pension liability	7,138,308	5,606,319
Deferred amounts related to total OPEB liability	8,031,751	12,047,631
	15,170,059	17,653,950
Total deferred inflows of resources	15,170,059	17,653,950
Net position:		
Net investment in capital assets	2,631,802,752	2,543,371,049
Restricted for debt service	43,839,618	46,042,585
Unrestricted (deficit)	(319,374,318)	(344,611,643)
	2,356,268,052	2,244,801,991
Total net position	2,356,268,052	2,244,801,991
Total liabilities, deferred inflows of resources, and net position	\$ 3,557,072,222	\$ 3,484,427,473

See accompanying notes to financial statements.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**  
**For the years ended December 31, 2019 and 2018**

	<b>2019</b>	<b>2018</b>
Operating revenues:		
Sales of water and delinquent fees	\$ 113,339,213	\$ 90,287,081
Sewerage service charges	143,686,137	114,614,157
Plumbing inspection and license fees	582,056	648,332
Other revenue	5,351,115	5,687,203
	262,958,521	211,236,773
Total operating revenues		
Operating expenses:		
Power and pumping	20,013,016	31,874,462
Treatment	19,688,222	22,958,975
Transmission and distribution	38,176,467	46,530,018
Customer accounts	5,431,786	5,243,276
Customer service	5,304,138	4,476,414
Administration and general	29,023,557	28,253,318
Payroll related expenses	53,838,316	49,416,581
Maintenance of general plant	27,142,840	28,813,485
Depreciation	64,156,230	63,501,190
Provision for doubtful accounts	33,306,195	20,942,217
Provision (recovery) for claims	2,069,360	(7,202,684)
	298,150,127	294,807,252
Total operating expenses		
Operating loss	(35,191,606)	(83,570,479)
Non-operating revenues (expenses):		
Three-mill tax	15,300,420	15,504,589
Six-mill tax	16,241,889	15,576,221
Nine-mill tax	24,345,982	23,570,261
Two-mill tax	35	553
Other taxes	594,985	594,532
Contributions from other local governments (Note 17)	35,839,141	-
Federal noncapital grants	48,716	78,814
Interest income	1,610,012	833,128
Bond issuance costs	(127,550)	-
Interest expense	(228,235)	(248,469)
(Provision) recovery for grants	(7,230,828)	3,183,641
	86,394,567	59,093,270
Total non-operating revenues (expenses)		
Income (loss) before capital contributions	51,202,961	(24,477,209)
Capital contributions	60,263,100	100,287,756
Change in net position	111,466,061	75,810,547
Net position, beginning of year	2,244,801,991	2,168,991,444
Net position, end of year	\$ 2,356,268,052	\$ 2,244,801,991

See accompanying notes to financial statements.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
STATEMENTS OF CASH FLOWS  
ENTERPRISE FUND**

**For the years ended December 31, 2019 and 2018**

	<b>2019</b>	<b>2018</b>
Cash flows from operating activities		
Cash received from customers	\$ 230,131,135	\$ 175,466,377
Cash payments to suppliers for goods and services	(96,159,902)	(111,566,403)
Cash payments to employees for services	(94,946,146)	(93,097,973)
Other revenue	7,876,816	653,856
Net cash provided by (used in) operating activities	46,901,903	(28,544,143)
Cash flows from noncapital financing activities		
Proceeds from property taxes	57,887,283	58,405,872
Contributions from other local governments	35,839,141	-
Proceeds from federal noncapital grants	48,716	78,814
Net cash provided by noncapital financing activities	93,775,140	58,484,686
Cash flows from capital and related financing activities		
Acquisition and construction of capital assets	(140,616,949)	(161,931,426)
Principal payments and refundings of bonds payable	(16,573,848)	(17,129,385)
Proceeds from bonds payable	127,550	-
Payments for bond issuance costs	(127,550)	-
Principal payments on Debt Service Assistance Fund loan	(5,067,022)	(4,846,200)
Interest paid on bonds payable	(22,660,389)	(23,756,793)
Payments to construction fund	(11,221,710)	(2,104,067)
Proceeds from construction fund	-	84,631
Capital contributed by developers and federal grants	38,276,178	108,484,725
Net cash used in capital and related financing activities	(157,863,740)	(101,198,515)
Cash flows from investing activities		
Investment income	1,634,908	1,220,452
Net cash provided by investing activities	1,634,908	1,220,452
Net decrease in cash	(15,551,789)	(70,037,520)
Cash at the beginning of the year	134,659,833	204,697,353
Cash at the end of the year	\$ 119,108,044	\$ 134,659,833
Reconciliation of cash, designated cash, and restricted cash (Note 2)		
Current assets - cash	\$ 71,806,291	\$ 67,816,770
Restricted assets - cash	47,301,753	66,843,063
Total cash	\$ 119,108,044	\$ 134,659,833

**(Continued)**

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**STATEMENTS OF CASH FLOWS**  
**ENTERPRISE FUND**  
**For the years ended December 31, 2019 and 2018**  
**(Continued)**

	<b>2019</b>	<b>2018</b>
Reconciliation of operating loss to net cash provided by operating activities is as follows:		
Operating loss	\$ (35,191,606)	\$ (83,570,479)
Adjustments to reconcile net operating loss to net cash provided by operating activities:		
Depreciation	64,156,230	63,501,190
Provision (recovery) for claims	2,069,360	(7,202,684)
Provision for doubtful accounts	33,306,195	20,942,217
Change in operating assets and liabilities:		
Increase in customer receivables	(26,978,292)	(30,059,251)
(Decrease) increase in due from other internal departments	1,995,000	(1,995,000)
(Increase) decrease in inventory	(248,297)	91,379
Increase in prepaid expenses and other receivables	(84,773)	(3,265,622)
Decrease (increase) in deferred outflows of resources related to net pension liability and total OPEB liability	1,675,836	(31,720,527)
(Decrease) increase in net pension obligation	(18,832,047)	40,939,747
(Decrease) increase in accounts payable	(6,359,824)	1,483,846
Increase in accrued salaries, due to pension and accrued vacation and sick pay	836,370	1,481,889
Increase in customer deposits	216,187	337,875
Increase (decrease) in total OPEB liability	36,615,829	(12,046,251)
Decrease in other liabilities	(3,790,374)	(3,248,454)
(Decrease) increase in deferred inflows of resources related to net pension liability and total OPEB liability	(2,483,891)	15,785,982
Net cash provided by (used in) operating activities	\$ 46,901,903	\$ (28,544,143)
Schedule of non-cash capital and related financing activities		
Contributions of capital assets	\$ 24,609,637	\$ 31,923,743
Additions of property, plant and equipment in accounts payable	\$ 18,170,374	\$ 44,868,859

See accompanying notes to financial statements.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**STATEMENTS OF FIDUCIARY NET POSITION**  
**PENSION TRUST FUND**  
**December 31, 2019 and 2018**

	2019	2018
Assets:		
Cash	\$ 442,289	\$ 1,456
Receivables:		
Investment income	37,385	63,354
Employee and employer contributions receivable	401,557	-
Due from other fund	343,344	73,777
Investments:		
Money market	2,544,817	1,682,862
LAMP	14,215,086	12,215,716
Debt securities	78,673,129	79,846,858
Equities	144,197,695	123,390,760
Total assets	240,855,302	217,274,783
Liabilities:		
Other liabilities	1,177,600	-
Due to other fund	-	1,995,000
Total Liabilities	1,177,600	1,995,000
Net position - restricted for pension benefits	\$ 239,677,702	\$ 215,279,783

See accompanying notes to financial statements.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**STATEMENTS OF CHANGES IN FIDUCIARY PLAN NET POSITION**  
**PENSION TRUST FUND**  
**For the years ended December 31, 2019 and 2018**

	<b>2019</b>	<b>2018</b>
Additions:		
Contributions:		
Employee contributions	\$ 2,793,158	\$ 2,535,027
Employer contributions	10,466,009	8,419,441
City annuity and other transfers in	337,103	232,455
	13,596,270	11,186,923
Investment income:		
Interest income	95,423	329,929
Dividend income	1,622,096	1,363,919
Net appreciation (depreciation)	32,715,180	(8,547,940)
	34,432,699	(6,854,092)
Less: investment expense	769,908	1,014,187
	33,662,791	(7,868,279)
	47,259,061	3,318,644
Deductions:		
Benefits	(20,438,403)	(18,565,085)
Employee refunds	(481,801)	(355,206)
Employee contributions to DROP	(1,940,938)	(4,402,887)
	(22,861,142)	(23,323,178)
Change in net position	24,397,919	(20,004,534)
Net position restricted for pension benefits at beginning of year	215,279,783	235,284,317
Net position restricted for pension benefits at end of year	\$ 239,677,702	\$ 215,279,783

See accompanying notes to financial statements.

**NOTES TO  
BASIC FINANCIAL STATEMENTS**

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS

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### 1. Summary of Significant Accounting Policies

#### A. History and Organization

The major operation of the Sewerage and Water Board of New Orleans (the Board) is providing water, sewerage, and drainage services for the City of New Orleans (the City). The Sewerage and Water Board of New Orleans was created by Act 6 of the Louisiana Legislature of 1899 as a special board independent of the City's government to construct, maintain, and operate a water treatment and distribution system and a public sanitary sewerage system for the City. In 1903, the Legislature gave the Board control of and responsibility for the City's major drainage system and relieved the City of the duty of providing in its annual operating budget or otherwise for the maintenance and operations of the water, sewerage, and drainage systems.

In accordance with the Louisiana Revised Statutes (LRS) 33:4096 and 4121, the Board has the authority to establish the water and sewerage rates to charge to its customers. The rates are based on the actual water consumed and on the costs of maintenance and operation of the water and sewerage systems, including the costs of improvements and replacements. The collections of water and sewerage revenues are to be used by the Board for the maintenance and operation of the systems, the cost of improvements, betterments, and replacements and to provide for the payments of interest and principal on the bonds payable. On November 14, 2012, the Board approved both sewer and water rate increases commencing January 1, 2013. The sewer and water rates increase approximately 10% each year until the year of 2020. This increase was approved by the New Orleans City Council on November 14, 2012.

The Board has also been given the authority to levy and collect various tax mileages, which are used for the operation and maintenance of the drainage operations. All excess revenues collected are made available for capital development of the system. The proceeds of the rate collections and tax milage are invested in such investments as authorized by the LRS. These investments are reflected in the combined statements of net position, as "restricted assets," as they are restricted to the purposes as described above.

The Sewerage and Water Board of New Orleans' eleven-member Board of Directors consists of the Mayor, the chair of the Public Works, Sanitation and Environment Committee of the New Orleans City Council or his designee, two representatives of the Board of Liquidation, and seven citizen members, of which five represent council districts and two consumer advocates and one of the appointments shall be a retired civil engineer.

The Board's accounting policies conform to accounting principles generally accepted in the United States of America as applicable to utilities and to governmental units as set forth through the Government Accounting Standard Board. The following is a summary of the more significant policies.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS (Continued)

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### 1. Summary of Significant Accounting Policies (continued)

#### B. Reporting Entity

In conformity with the Governmental Accounting Standards Board's definition of a reporting entity, the Board includes an enterprise fund and a pension trust fund for financial reporting purposes. The Board is considered a reporting entity based on the following criteria:

- 1) Responsibility for surpluses/deficits. The Board is solely responsible for its surpluses/deficits. In accordance with LRS, no other governmental unit is responsible for the Board's deficits or has a claim to its surpluses. The Board's operations are self-sustaining; revenues are generated through charges to customers and dedicated property taxes. Other than grants, no funding is received from the State of Louisiana or the City of New Orleans.
- 2) Budget Approval. The Board is solely responsible for reviewing, approving, and revising its budget.
- 3) Responsibility for Debt. The LRS authorize the Board to issue bonds; such bonds must bear on their face a statement that they do not constitute a debt of the City. The Board is solely responsible for payments to bondholders. No other governmental unit is required by statute to make any payments to bondholders nor have any payments to bondholders ever been made by any governmental unit, except the Board.
- 4) Designation of Management. The Board controls the hiring of management and employees.
- 5) Special Financial Relationship. The Board has no special financial relationships with any other governmental unit.
- 6) Statutory Authority. The Board's statutory authority was created by the State of Louisiana as an independent governmental unit. Only an amendment to the state statutes can change or abolish the Board's authority.

The Board is a component unit of the City of New Orleans as defined by Governmental Accounting Standards Board Statement 61, *The Financial Reporting Entity: Omnibus—an amendment of GASB Statements No. 14 and No. 34 and GASB Codification Section 2100*. As a result of a Louisiana Supreme Court decision on March 21, 1994, the Board was declared to be an autonomous or self-governing legal entity, legally independent of the City, State and other governments, created and organized pursuant to Louisiana Revised Statutes 33:4071 as a board, separate and independent of the governing authorities of the City and vested with autonomous or self-governing authority. No other government can mandate actions of the Board nor impose specific financial burdens, except the approval of the City Council and the Board of Liquidation in the case of bond issues and certain rate increases. As such, the City considers the Board to be a component unit of the City and includes the Board, as a discreetly presented component unit, in the City's annual financial statements. However, the Board is fiscally independent to operate under its bond covenant and the provisions of LRS provisions.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS (Continued)

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### 1. Summary of Significant Accounting Policies (continued)

#### C. Basis of Financial Statement Presentation

The Board's basic financial statements consist of the government-wide statements which include the proprietary fund (the enterprise fund) and the fund financial statements which includes the fiduciary fund (the pension trust fund).

The operations of the Board are accounted for in the following fund types:

#### Proprietary Fund Type

The proprietary fund is used to account for the Board's ongoing operations and activities, which are similar to those often found in the private sector. The proprietary fund is accounted for using a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operation of these funds are included on the statement of net position. Net position is segregated into amounts invested in capital assets (net of related debt), restricted for debt service, restricted for capital projects, and unrestricted. The Board's restricted assets are expendable for their purposes. The Board utilizes available unrestricted assets before utilizing restricted assets. The operating statements present increases (revenues) and decreases (expenses) in net position. The Board maintains one proprietary fund type – the enterprise fund. The enterprise fund is used to account for operations (a) that are financed and operated in a manner similar to private business enterprises--where the intent of the governing body is that the cost (expenses, including depreciation) of providing goods or services to the general public on a continuing basis be financed or recovered primarily through user charges; or (b) where the governing body has decided that periodic determination of revenues earned, expenses incurred, and/or net income is appropriate for capital maintenance.

Operating revenues include all charges for service; other revenues include reconnection fees and other miscellaneous charges. Operating expenses include the costs associated with providing water, sewerage, and drainage services. Interest income, interest expense, grants from other governments, and tax revenues are presented as non-operating items.

The enterprise fund is presented in the government-wide financial statements.

#### Fiduciary Fund Type

The fiduciary fund is used to account for assets held by the Board in a trustee capacity or as an agent for individuals, private organizations, other governmental units, and/or other funds. The Board maintains one fiduciary fund type - the pension trust fund. The pension trust fund uses the flow of economic resources measurement focus. All assets and liabilities associated with the operation of this fund are included in the statement of plan net assets. The pension trust fund is used to account for the activity of the Board's employee retirement plan, which is a blended component unit of the Board as defined by Section 2100 of the GASB Codification.

The pension trust fund is presented in the fund financial statements.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS  
(Continued)

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1. Summary of Significant Accounting Policies (continued)

D. Basis of Accounting

The enterprise fund and the pension trust fund prepare their financial statements on the accrual basis of accounting. Unbilled utility service charges are not recorded as management considers the effect of not recording such unbilled receivables as not material. Property taxes are recorded as revenue in the year for which they are levied. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the pension plan are recognized when due and the employer has made a commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

E. Investments

Investments are recorded at fair value, except for short-term investments (maturity of one year or less), which are recorded at amortized cost, which approximates fair value. Securities traded in a national or international exchange are valued at the last recorded sales price at current exchange rates. Investments that do not have an established market are recorded at estimated fair value. Investment income and expenses, including changes in the fair value of the investments, are recognized in the Statements of Revenues, Expenses, and Changes in Net Position.

F. Inventory of Supplies

Inventory of supplies is valued at cost. Cost is determined by the weighted average cost method.

G. Vacation and Sick Pay

Vacation (annual leave) and sick pay (sick leave) are accrued when earned. Annual leave is accrued at the rate of .6923 of a workday for each bi-weekly accrual period for all employees on the payroll as of December 31, 1978. Employees hired after that date earn leave at a rate of .5 of a workday per bi-weekly pay period.

All employees on the payroll as of December 31, 1978 receive three bonus days each year; all employees hired after that date receive three bonus days each year for five through nine calendar years of continuous service; six bonus days each year for ten through fourteen years; nine bonus days each year for fifteen through nineteen years; and, twelve days for twenty or more years of continuous service. Civil Service's policy permits employees a limited amount of earned but unused annual leave which will be paid to employees upon separation from the Board. The amount shall not exceed ninety days for employees hired before January 1, 1979, and forty-five days for employees hired after December 31, 1978.

Sick leave is accumulated on a bi-weekly basis by all employees hired prior to December 31, 1978 at an accrual rate of .923 of a workday. For employees hired subsequent to December 31, 1978, the accrual rate is .5 of a workday for each bi-weekly period, plus a two-day bonus each year for employees with six through fifteen calendar years of continuous service, and seven bonus days each year for employees with sixteen or more calendar years of continuous service.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**1. Summary of Significant Accounting Policies (continued)**

**G. Vacation and Sick Pay (continued)**

Upon separation from the Board, an employee can elect to convert unused sick leave for retirement credits or cash. The conversion to cash is determined by a rate ranging from one day of pay for five days of leave for the 1st through 100th leave day to one day of pay for one day of leave for all days in excess of the 400th leave day. The total liability for unconverted sick leave as of December 31, 2019 and 2018 is approximately \$13,821,188 and \$13,258,512, respectively. The amount included in the statements of net position as of December 31, 2019 and 2018 is \$9,068,334 and \$9,693,790, respectively, which represents the annual leave and the converted sick leave for cash since virtually all employees convert their sick leave to cash. The Board books the compensated absences as a long-term liability. The amounts for compensated absences include the salary cost as well as certain salary related costs, such as the Board's share of social security expense. The following table summarizes changes in the Board's vacation and sick pay liability.

<u>Year</u>	<u>Beginning of Year Liability</u>	<u>Current Year Earned and Changes in Estimate</u>	<u>Payments</u>	<u>End of Year Liability</u>
2019	\$ 9,693,790	\$ 4,306,153	\$ (4,931,609)	\$ 9,068,334
2018	\$ 8,000,124	\$ 5,711,446	\$ (4,017,780)	\$ 9,693,790

**H. Property, Plant, and Equipment**

Property, plant, and equipment are carried at historical cost. The Board capitalizes moveable equipment with a value of \$10,000 or greater, stationary, network, and other equipment with a value of \$5,000 or greater and all real estate. The cost of additions includes contracted work, direct labor, materials, and allocable cost. Donated capital assets are recorded at their acquisition value at the date of donation.

Interest is capitalized on property, plant, and equipment acquired and/or constructed with tax exempt debt. Depreciation is computed using the straight-line method over the estimated useful life of the asset. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and any resulting gain or loss is recognized in revenue for the period. The cost of maintenance and repairs is charged to operations as incurred, and significant renewals and betterments are capitalized. Deductions are made for retirements resulting from renewals or betterments.

**I. Self-Insurance/Risk Management**

The Board is self-insured for general liability, workers' compensation, unemployment compensation, and hospitalization benefits and claims. The accrued liability for the various types of claims represents an estimate by management of the eventual loss on the claims arising prior to year-end, including claims incurred and not yet recorded including estimates of both future payments of losses and related claims adjustment and expense. Estimated expenses and recoveries are based on a case by case review.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS (Continued)

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### 1. Summary of Significant Accounting Policies (continued)

#### J. Bond Issuance Costs and Refinancing Gains (Losses)

Costs related to issuing bonds are expensed when incurred. Premiums and discounts associated with bond issues are amortized over the interest yield method.

#### K. Deferred Inflows/Outflows of Resources

Deferred outflows of resources represent a consumption of net position that applies to future periods and so will not be recognized as an outflow of resources (expense) until then. The deferred charge on refunding recorded on the statements of net position results from the difference in carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt.

Deferred inflows and outflows have been recognized for the net difference between the projected and actual investment earnings, this amount is deferred and amortized over a period of five years. In addition, deferred inflows and outflows have been recognized for the differences between the actuarial expectation and the actual economic experience and changes in actuarial assumptions related to the defined benefit pension plan and the other post-retirement benefit plan. These amounts are deferred and amortized over the average of the expected service lives of pension plan members. See Note 7 and Note 8 for additional information on deferred inflows and outflows related to the pension plan and the other post-retirement benefits plan, respectively.

#### L. Pension

The Board may fund all or part of the accrued pension cost, depending on the resources that are available at the time of contribution, for its contributory pension plan which covers substantially all employees. Annual costs are actuarially computed using the entry age normal cost method.

#### M. Drainage System

In 1903, the Legislature gave the Board control of and responsibility for the City's drainage system. The Drainage System was established as a department of the enterprise fund to account for the revenues from three-mill, six-mill, and nine-mill ad valorem taxes designated exclusively for drainage services. These revenues have been supplemented by inspection and license fees collected by the Board. There exists a potential for additional financing by additional user service charges. Expenditures from the system are for the debt service of three-mill, six-mill, and nine-mill tax bonds and drainage related operation, maintenance, and construction.

#### N. Capital Contributions

Contributions from developers and others, and receipts of Federal, State, and City grants for acquisition of property, plant, and equipment are recorded as capital contributions in the statements of revenues, expenses, and changes in net position.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS (Continued)

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### 1. Summary of Significant Accounting Policies (continued)

#### O. Net Position Flow Assumption

Sometimes the Board will fund outlays for a particular purpose from both restricted (e.g. restricted bond or grant proceeds) and unrestricted resources. In order to calculate the amounts to report as restricted net position and unrestricted net position, a flow assumption must be made about the order in which the resources are considered to be applied. The Board's policy is to consider restricted net position to have been depleted before unrestricted-net position is applied.

#### P. Net Position

Net investment in capital assets – This component of net position consists of capital assets, net of accumulated depreciation, and reduced by the outstanding debt 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 this component of net position. Rather, that portion of debt is included in the same component of net position as the unspent proceeds.

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

Unrestricted – Unrestricted net position is the balance (deficit) of all other elements in a statement of net position remaining after net investment in capital assets and restricted net position.

#### Q. Cash Flows

For purposes of the statements of cash flows, only cash on hand and on deposit at financial institutions is considered to be cash equivalents. Certificates of deposits, treasury bills, and other securities are considered investments.

#### R. Operating and Nonoperating Revenues

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and delivering goods in connection with principal ongoing operations. The principal operating revenues of the Board are charges to customers for sales and services. Operating expenses include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are recorded as nonoperating revenues and expenses.

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS  
(Continued)

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1. Summary of Significant Accounting Policies (continued)

S. Use of Estimates

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

T. Reclassifications

Certain accounts in the prior-year financial statements have been reclassified for comparative purposes to conform to the presentation in the current-year financial statements. This reclassification had no effect on previously reported change in net position.

2. Cash and Investments

The Board's investments and cash consist primarily of investments in direct obligations of the United States or agencies thereof and deposits with financial institutions.

Custodial Credit Risk – Deposits – Custodial credit risk is the risk that in the event of a bank failure, the government's deposits may not be returned to it. Statutes require that the Board's cash and certificates of deposit be covered by federal depository insurance or collateral. At December 31, 2019, the Board's interest bearing deposits with banks consisted of cash and money market funds totaling \$50,557,876 and certificates of deposit of \$28,058,822. At December 31, 2018, the Board's interest bearing deposits with banks consisted of cash and money market funds totaling \$93,431,241 and certificates of deposit of \$275,567. The Board's cash bank balances and all certificates of deposit for 2019 and 2018 were covered by federal depository insurance or collateral held by custodial agents of the financial institutions in the name of the Board.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**2. Cash and Investments (continued)**

The following are the components of the Board's cash and investments as of December 31 for the Enterprise Fund:

	<b>2019</b>		
	<b>Unrestricted</b>	<b>Restricted</b>	<b>Total</b>
Cash and money market funds	\$ 71,528,865	\$ 47,301,753	\$ 118,830,618
Certificates of deposit	277,426	-	277,426
	71,806,291	47,301,753	119,108,044
Investments - LAMP	3,250,000	2,641,723	5,891,723
Total cash and investments	<u>\$ 75,056,291</u>	<u>\$ 49,943,476</u>	<u>\$ 124,999,767</u>

	<b>2018</b>		
	<b>Unrestricted</b>	<b>Restricted</b>	<b>Total</b>
Cash and money market funds	\$ 67,541,203	\$ 66,843,063	\$ 134,384,266
Certificates of deposit	275,567	-	275,567
	67,816,770	66,843,063	134,659,833
Investments - LAMP	3,250,000	2,641,723	5,891,723
Total cash and investments	<u>\$ 71,066,770</u>	<u>\$ 69,484,786</u>	<u>\$ 140,551,556</u>

**A. Fair Value Measurement**

To the extent available, the Board's investments are recorded at fair value as of December 31, 2019 and 2018. GASB Statement No. 72 – Fair Value Measurement and Application, defines fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. This statement establishes a hierarchy of valuation inputs based on the extent to which the inputs are observable in the marketplace. Inputs are used in applying the various valuation techniques and take into account the assumptions that market participants use to make valuation decisions. Inputs may include price information, credit data, interest and yield curve data, and other factors specific to the financial instrument. Observable inputs reflect market data obtained from independent sources. In contrast, unobservable inputs reflect the entity's assumptions about how market participants would value the financial instrument. Valuation techniques should maximize the use of observable inputs to the extent available.

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. The following describes the hierarchy of inputs used to measure fair value and the primary valuation methodologies used for financial instruments measured at fair value on a recurring basis.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

### NOTES TO FINANCIAL STATEMENTS (Continued)

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#### 2. Cash and Investments (continued)

##### A. Fair Value Measurement (continued)

The framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements).

The three levels of the fair value hierarchy are described as follows:

Level 1: Inputs to the valuation methodology are unadjusted quoted prices for identical assets or liabilities in active markets that the Board has the ability to access at the measurement date.

Level 2: Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets; quoted prices for identical or similar assets or liabilities in inactive markets; inputs other than quoted prices that are observable for the asset or liability; inputs that are derived principally from or corroborated by observable market data by correlation or other means. If the asset or liability has a specified (contractual) term, the level 2 input must be observable for substantially the full term of the asset or liability.

Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement determined using model-based techniques that include option pricing models, discounted cash flow models, and similar techniques.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

Investments - Statutes authorize the Board to invest in obligations of the U.S. Treasury, agencies, and instrumentalities, commercial paper rated A-1 by Standard & Poors Corporation or P-1 by Moody's Commercial Paper Record, repurchase agreements, and the Louisiana Asset Management Pool (LAMP). In addition, the pension trust fund is authorized to invest in corporate bonds rated BBB or better by Standard & Poors Corporation or Baa or better by Moody's Investors Service and equity securities.

Money market funds, LAMP, and certificate of deposit are measured using NAV as a practical expedient. These investments have not been classified in the fair value hierarchy table. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the line items presented in the statements of net position.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**2. Cash and Investments (continued)**

A. Fair Value Measurement (continued)

A summary of the Board's investments, including the Pension Trust Fund, along with the Fair value hierarchy levels of each type of investment as of December 31, 2019 and 2018 are as follows:

	<b>2019</b>			
	<u>Total</u>	<u>Quoted Prices in Active Markets (Level 1 Inputs)</u>	<u>Significant Other Observable Inputs (Level 2 Inputs)</u>	<u>Significant Unobservable Inputs (Level 3 Inputs)</u>
Investment by Fair Value Level:				
Equities	\$ 144,197,695	\$ 144,197,695	\$ -	\$ -
Debt Securities	<u>78,673,129</u>	<u>-</u>	<u>78,673,129</u>	
Total Investments at Fair Value Level	<u>\$ 222,870,824</u>	<u>\$ 144,197,695</u>	<u>\$ 78,673,129</u>	<u>\$ -</u>
Investment measured at the net asset value (NAV):				
Money market funds	\$ 67,964,643			
LAMP	20,106,809			
Certificate of Deposit	<u>277,426</u>			
Total Investments at NAV	<u>\$ 88,348,878</u>			
Total Investments at Fair Value	<u>\$ 311,219,702</u>			
	<b>2018</b>			
	<u>Total</u>	<u>Quoted Prices in Active Markets (Level 1 Inputs)</u>	<u>Significant Other Observable Inputs (Level 2 Inputs)</u>	<u>Significant Unobservable Inputs (Level 3 Inputs)</u>
Investment by Fair Value Level:				
Equities	\$ 123,390,760	\$ 123,390,760	\$ -	\$ -
Debt Securities	<u>79,846,858</u>	<u>-</u>	<u>79,846,858</u>	
Total Investments at Fair Value Level	<u>\$ 203,237,618</u>	<u>\$ 123,390,760</u>	<u>\$ 79,846,858</u>	<u>\$ -</u>
Investment measured at the net asset value (NAV):				
Money market funds	\$ 70,106,275			
LAMP	18,107,439			
Certificate of Deposit	<u>275,567</u>			
Total Investments at NAV	<u>\$ 88,489,281</u>			
Total Investments at Fair Value	<u>\$ 291,726,899</u>			

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**2. Cash and Investments (continued)**

A. Fair Value Measurement (continued)

A reconciliation of the enterprise and pension funds to the total investments at December 31, 2019 and 2018 is as follows:

	<b>2019</b>		
	<b>Enterprise</b>	<b>Pension</b>	<b>Total</b>
Money market	\$ 65,419,826	\$ 2,544,817	\$ 67,964,643
LAMP	5,891,723	14,215,086	20,106,809
Certificate of deposit	277,426	-	277,426
Other investments	-	222,870,824	222,870,824
<b>Total cash and investments</b>	<b>\$ 71,588,975</b>	<b>\$ 239,630,727</b>	<b>\$ 311,219,702</b>

A reconciliation of the enterprise and pension funds to the total investments at December 31, 2018 is as follows:

	<b>2018</b>		
	<b>Enterprise</b>	<b>Pension</b>	<b>Total</b>
Money market	68,423,413	1,682,862	\$ 70,106,275
LAMP	5,891,723	12,215,716	18,107,439
Certificate of deposit	275,567	-	275,567
Other investments	-	203,237,618	203,237,618
<b>Total cash and investments</b>	<b>\$ 74,590,703</b>	<b>\$ 217,136,196</b>	<b>\$ 291,726,899</b>

Pension trust fund investments are held in trust and governed pursuant to an indenture between the trustee financial institution and the Board.

B. Louisiana Asset Management Pool (LAMP)

LAMP is administered by LAMP, Inc., a non-profit corporation organized under the laws of the State of Louisiana. Only local government entities having contracted to participate in LAMP have an investment interest in its pool of assets. The primary objective of LAMP is to provide a safe environment for the placement of public funds in short-term, high quality investments. The LAMP portfolio includes only securities and other obligations in which local governments in Louisiana are authorized to invest in accordance with Louisiana R.S. 33:2955.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

### NOTES TO FINANCIAL STATEMENTS (Continued)

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#### 2. Cash and Investments (continued)

##### B. Louisiana Asset Management Pool (LAMP) (continued)

GASB Statement No. 40 Deposit and Investment Risk Disclosure, requires disclosure of credit risk, custodial credit risk, concentration of credit risk interest rate risk, and foreign currency risk for all public entity investments.

LAMP is an investment pool that, to the extent practical, invests in a manner consistent with GASB Statement No. 79. The following facts are relevant for investment pools:

- Credit risk: LAMP is rated AAAM by Standard & Poor's.
- Custodial credit risk: LAMP participants' investments in the pool are evidenced by shares of the pool. Investments in pools should be disclosed but not categorized because they are not evidenced by securities that exist in physical or book-entry form. The public entity's investment is with the pool, not the securities that make up the pool; therefore, no disclosure is required.
- Concentration of credit risk: Pooled investments are excluded from the 5 percent disclosure requirement.
- Interest rate risk: LAMP is designed to be highly liquid to give its participants immediate access to their account balances. LAMP prepares its own interest rate risk disclosure using the weighted average maturity (WAM) method. The WAM of LAMP assets is restricted to not more than 60 days and consists of no securities with a maturity in excess of 397 days or 762 days for U.S. Government floating/variable rate investments. The WAM for LAMP's total investments is 92 as of December 31, 2019.
- Foreign currency risk: Not applicable.

The investments in LAMP are stated at fair value. The fair value is determined on a weekly basis by LAMP and the value of the position in the external investment pool is the same as the net asset value of the pool shares.

LAMP, Inc. is subject to the regulatory oversight of the state treasurer and the board of directors. LAMP is not registered with the SEC as an investment company.

##### C. Credit and Interest Risk

Credit Risk - State law limits investments in securities issued, or backed by United States Treasury obligations, and U.S. Government instrumentalities, which are federally sponsored. The Board's investment policy does not further limit its investment choices. LAMP is rated AAAM by Standard & Poor's. The Pension Trust Fund's investment policy requires that fixed income investments be investment grade (BBB or higher as rated by Standard & Poor's or Baa or higher as rated by Moody's). Bonds rated below BBB/Baa are not to exceed 15% of the portfolio, and non-rated bonds are not to exceed 1% of the portfolio.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**2. Cash and Investments (continued)**

**C. Credit and Interest Risk (continued)**

Interest Rate Risk - Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. In general, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. The Board has a formal investment policy that states that the investment portfolio shall remain sufficiently liquid to meet all operating and capital requirements that may be reasonably anticipated and that maturities of investments are to be structured concurrent with cash needs to meet anticipated demand.

Foreign Currency Risk – The Pension Trust Fund’s exposure to foreign currency risk derives from its positions in foreign currency-denominated fixed-income investments. The Pension Trust Fund's investment policy permits it to invest up to 5 percent of total investments in foreign currency-denominated fixed-income investments. The Pension Trust Fund's current position is 2.0 percent. The investments in foreign currency-denominated corporate bonds were rated by Standard & Poor's.

Following are the credit risk ratings of the Pension Trust Fund’s investments in debt securities as of December 31, 2019:

Rating	Corporate Bonds	Foreign Government Bonds	Government Bonds and U.S. Treasury Notes	Other	Total	Percentage of Total
AAA	\$ -	\$ 6,772	\$ -	\$ 15,965,835	\$ 15,972,607	20.30%
AA+	-	-	-	11,631	11,631	0.01%
AA	50,419	6,737	-	35,939	93,095	0.12%
AA-	1,068,233	48,745	-	128,159	1,245,137	1.58%
A+	1,044,208	155,213	-	-	1,199,421	1.52%
A	2,691,637	34,736	-	756,399	3,482,772	4.43%
A-	5,720,896	60,421	-	164,295	5,945,612	7.56%
BBB+	2,940,219	1,308,003	-	105,645	4,353,867	5.53%
BBB	4,416,503	198,702	-	303,258	4,918,463	6.25%
BBB-	4,830,545	22,273	-	737,991	5,590,809	7.11%
BB+	1,136,805	50,793	-	140,524	1,328,122	1.69%
BB	1,531,796	167,388	-	127,767	1,826,951	2.32%
BB-	845,587	209,013	-	149,885	1,204,485	1.53%
B+	524,361	242,151	-	10,317	776,829	0.99%
B	850,735	276,774	-	153,969	1,281,478	1.63%
B-	453,098	97,423	-	183,051	733,572	0.93%
CCC+	280,730	35,647	-	-	316,377	0.40%
CCC	152,170	195,978	-	14,030	362,178	0.46%
C	1,313	-	-	-	1,313	0.00%
Not Rated	158,177	81,096	26,351,548	1,437,589	28,028,410	35.63%
<b>Total</b>	<b>\$ 28,697,432</b>	<b>\$ 3,197,865</b>	<b>\$ 26,351,548</b>	<b>\$ 20,426,284</b>	<b>\$ 78,673,129</b>	<b>100.00%</b>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**2. Cash and Investments (continued)**

**C. Credit and Interest Risk (continued)**

Following are the credit risk ratings of the Pension Trust Fund's investments in debt securities as of December 31, 2018:

Rating	Corporate Bonds	Foreign Government Bonds	Government Bonds and U.S. Treasury Notes	Other	Total	Percentage of Total
AAA	\$ -	\$ 77,436	\$ -	\$ 19,836,544	\$ 19,913,980	24.94%
AA-	-	-	-	4,568	4,568	0.01%
AA	52,304	214,378	-	73,752	340,434	0.43%
AA-	832,954	17,339	-	13,810	864,103	1.08%
A-	1,238,783	-	-	-	1,238,783	1.55%
A	3,063,443	-	-	401,221	3,464,664	4.34%
A-	4,433,541	102,295	-	145,759	4,681,595	5.86%
BBB-	2,646,483	1,782,272	-	129,144	4,557,899	5.71%
BBB	3,738,728	105,312	-	164,878	4,008,918	5.02%
BBB-	3,945,209	101,140	-	709,902	4,756,251	5.96%
BB+	815,168	52,055	-	160,445	1,027,668	1.29%
BB	724,745	559,172	-	171,100	1,455,017	1.82%
BB-	513,814	142,769	-	155,164	811,747	1.02%
B+	336,640	184,666	-	61,441	582,747	0.73%
B	432,304	571,415	-	206,084	1,209,803	1.52%
B-	265,336	349,440	-	194,628	809,404	1.01%
CCC-	79,931	-	-	2,888	82,819	0.10%
CCC	42,516	118	-	17,260	59,894	0.08%
CC	-	233	-	-	233	0.00%
C	-	-	-	37,849	37,849	0.05%
Not Rated	128,484	-	29,809,998	-	29,938,482	37.49%
<b>Total</b>	<b>\$ 23,290,383</b>	<b>\$ 4,260,040</b>	<b>\$ 29,809,998</b>	<b>\$ 22,486,437</b>	<b>\$ 79,846,858</b>	<b>100.00%</b>

**D. Concentration of Credit Risk**

Per GASB Statement 40, *Deposit and Investment Risk Disclosures*, concentration of credit risk is defined as the risk of loss attributed the magnitude of government's investment in a single issuer. GASB 40 further defines an at-risk investment to be one that represents more than five percent (5%) of the fair value of the total investment portfolio and requires disclosure of such at-risk investments. GASB 40 specifically excludes investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments from the disclosure requirement. The Board has no investment in a single issuer that represent more than 5% of the investment portfolio. In addition, the Board's investments consist of investments in mutual funds, external investment pools, and other pooled investments.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**2. Cash and Investments (continued)**

**E. Pension Trust Fund Investments**

As of December 31, 2019, the Pension Trust Fund had the following investments in debt securities and maturities:

Investment Type	Duration					Total
	Less than 1 Year	1 - 5 Years	6 - 10 Years	Greater Than 10 Years	Duration Not Available	
Corporate Bonds	\$ 2,624,531	\$ 14,153,456	\$ 7,655,543	\$ 4,133,003	\$ 130,899	\$ 28,697,432
Foreign Government Bonds	139,341	811,616	958,505	1,288,403	-	3,197,865
Government Bonds and U.S. Treasury Notes	36,427	13,044,873	9,884,127	3,375,062	11,059	26,351,548
Other	1,482,543	17,828,733	800,503	192,550	121,955	20,426,284
<b>Total</b>	<b>\$ 4,282,842</b>	<b>\$ 45,838,678</b>	<b>\$ 19,298,678</b>	<b>\$ 8,989,018</b>	<b>\$ 263,913</b>	<b>\$ 78,673,129</b>

As of December 31, 2018, the Pension Trust Fund had the following investments in debt securities and maturities:

Investment Type	Duration					Total
	Less than 1 Year	1 - 5 Years	6 - 10 Years	Greater Than 10 Years	Duration Not Available	
Corporate Bonds	\$ 757,368	\$ 10,462,955	\$ 8,523,696	\$ 3,518,539	\$ 27,825	\$ 23,290,383
Foreign Government Bonds	322,621	2,374,111	820,195	743,113	-	4,260,040
Government Bonds and U.S. Treasury Notes	123,736	17,338,937	7,301,201	5,046,124	-	29,809,998
Other	1,406,747	11,745,698	9,275,301	-	58,691	22,486,437
<b>Total</b>	<b>\$ 2,610,472</b>	<b>\$ 41,921,701</b>	<b>\$ 25,920,393</b>	<b>\$ 9,307,776</b>	<b>\$ 86,516</b>	<b>\$ 79,846,858</b>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**2. Cash and Investments (continued)**

F. Security Lending

Under the provisions of its benefit plan and state law, the Board's pension benefit trust engages in securities lending to broker dealers and other entities for cash collateral that will be returned for the same securities in the future. The cash collateral cannot be liquidated by the Board unless the borrower defaults. Cash collateral is initially pledged at 102.25% of the market value of securities lent and additional collateral is provided by the next business day if the value falls to less than 100% of the market value of the securities lent. No collateral exposure existed at December 31, 2019 and 2018. The value of securities lent at December 31, 2019 and 2018 was \$31,606,146 and \$38,867,570, respectively. The market value of the cash collateral at December 31, 2019 and 2018 was \$32,010,943 and \$39,740,372, respectively.

**3. Customer Receivables**

Customer receivables as of December 31 consist of the following:

		<b>2019</b>		
		Customer	Allowance for Doubtful	
		Accounts	Accounts	Net
Water	S	48,002,969	\$ 31,360,329	\$ 16,642,640
Sewer		53,182,590	35,769,471	17,413,119
	S	<u>101,185,559</u>	<u>\$ 67,129,800</u>	<u>\$ 34,055,759</u>
		<b>2018</b>		
		Customer	Allowance for Doubtful	
		Accounts	Accounts	Net
Water	S	38,104,851	\$ 18,184,910	\$ 19,919,941
Sewer		40,847,768	20,384,047	20,463,721
	S	<u>78,952,619</u>	<u>\$ 38,568,957</u>	<u>\$ 40,383,662</u>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**4. Property, Plant, and Equipment**

The useful lives of property, plant, and equipment consisted of the following:

Power and pumping stations - buildings	57 years
Power and pumping stations - machinery	40 years
Distribution systems	75 years
Sewerage collection	75 years
Canals and subsurface drains	75 to 100 years
Treatment plants	50 years
Connections and meters	50 years
Power transmission	50 years
General plant	12 years
General buildings	25 years

Property, plant, and equipment consisted of the following as of December 31:

	<b>2019</b>			
<b>Cost</b>	<u>Beginning Balance</u>	<u>Additions</u>	<u>Deletions/ Reclassifications</u>	<u>Ending Balance</u>
Real estate rights, non depreciable	\$ 13,787,557	\$ -	\$ -	\$ 13,787,557
Power and pumping stations - buildings	396,603,698	-	-	396,603,698
Power and pumping stations - machinery	366,772,877	215,958	-	366,988,835
Distribution systems	362,282,822	11,856,348	(927,876)	373,211,294
Sewerage collection	742,695,414	104,113,167	(209,296)	846,599,285
Canals and subsurface drainage	916,810,550	115,974,314	-	1,032,784,864
Treatment plants	207,077,447	-	-	207,077,447
Connections and meters	106,914,465	998,676	(68,913)	107,844,228
Power transmission	37,361,629	-	(303,742)	37,057,887
General plant and buildings	333,536,294	12,669,452	(188,592)	346,017,154
Total property, plant, and equipment in service	<u>3,483,842,753</u>	<u>245,827,915</u>	<u>(1,698,419)</u>	<u>3,727,972,249</u>
Construction in progress	759,206,512	173,817,976	(245,752,878)	687,271,610
Total property, plant, and equipment	<u>4,243,049,265</u>	<u>419,645,891</u>	<u>(247,451,297)</u>	<u>4,415,243,859</u>
<b>Accumulated Depreciation</b>				
Power and pumping stations - buildings	159,765,462	7,182,742	-	166,948,204
Power and pumping stations - machinery	195,292,713	10,194,686	-	205,487,399
Distribution systems	57,292,876	5,170,345	(927,875)	61,535,346
Sewerage collection	73,780,749	10,855,798	(209,294)	84,427,253
Canals and subsurface drainage	111,371,494	10,490,044	-	121,861,538
Treatment plants	80,897,928	4,462,099	-	85,360,027
Connections and meters	42,192,235	1,730,357	(68,913)	43,853,679
Power transmission	17,759,854	854,709	-	18,614,563
General plant and buildings	295,833,877	13,215,450	(188,592)	308,860,735
Total accumulated depreciation	<u>1,034,187,188</u>	<u>64,156,230</u>	<u>(1,394,674)</u>	<u>1,096,948,744</u>
Net property, plant, and equipment	<u>\$ 3,208,862,077</u>	<u>\$ 355,489,661</u>	<u>\$ (246,056,623)</u>	<u>\$ 3,318,295,115</u>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**4. Property, Plant, and Equipment (continued)**

	<b>2018</b>			
	<u>Beginning Balance</u>	<u>Additions</u>	<u>Deletions/ Reclassifications</u>	<u>Ending Balance</u>
<b>Cost</b>				
Real estate rights, non depreciable	\$ 13,633,314	\$ 154,243	\$ -	\$ 13,787,557
Power and pumping stations - buildings	392,628,067	3,975,631	-	396,603,698
Power and pumping stations - machinery	352,957,605	13,815,272	-	366,772,877
Distribution systems	318,178,664	46,768,402	(2,664,244)	362,282,822
Sewerage collection	616,199,180	129,175,333	(2,679,099)	742,695,414
Canals and subsurface drainage	894,121,872	22,688,678	-	916,810,550
Treatment plants	206,081,699	995,748	-	207,077,447
Connections and meters	105,461,284	1,611,336	(158,155)	106,914,465
Power transmission	36,491,223	870,406	-	37,361,629
General plant and buildings	311,898,675	22,081,238	(443,619)	333,536,294
Total property, plant, and equipment in service	<u>3,247,651,583</u>	<u>242,136,287</u>	<u>(5,945,117)</u>	<u>3,483,842,753</u>
Construction in progress	748,072,327	253,270,472	(242,136,287)	759,206,512
Total property, plant, and equipment	<u>3,995,723,910</u>	<u>495,406,759</u>	<u>(248,081,404)</u>	<u>4,243,049,265</u>
<b>Accumulated Depreciation</b>				
Power and pumping stations - buildings	152,824,897	6,940,565	-	159,765,462
Power and pumping stations - machinery	186,124,471	9,168,242	-	195,292,713
Distribution systems	55,009,815	4,947,305	(2,664,244)	57,292,876
Sewerage collection	66,080,583	10,379,263	(2,679,097)	73,780,749
Canals and subsurface drainage	102,067,331	9,304,163	-	111,371,494
Treatment plants	76,756,379	4,141,549	-	80,897,928
Connections and meters	40,212,101	2,138,289	(158,155)	42,192,235
Power transmission	17,028,057	731,797	-	17,759,854
General plant and buildings	280,527,479	15,750,017	(443,619)	295,833,877
Total accumulated depreciation	<u>976,631,113</u>	<u>63,501,190</u>	<u>(5,945,115)</u>	<u>1,034,187,188</u>
Net property, plant, and equipment	<u>\$ 3,019,092,797</u>	<u>\$ 431,905,569</u>	<u>\$ (242,136,289)</u>	<u>\$ 3,208,862,077</u>

Interest capitalized was as follows for the years ended December 31:

	<u>2019</u>	<u>2018</u>
Interest income	\$ 2,593,342	\$ 2,955,770
Interest expense	<u>(22,599,934)</u>	<u>(23,685,923)</u>
Net interest capitalized	<u>\$ (20,006,592)</u>	<u>\$ (20,730,153)</u>

**5. Due to City of New Orleans**

The Board bills and collects sanitation charges on behalf of the City of New Orleans (the City). The Board is not liable for any uncollected sanitation charges. Additionally, amounts included in accounts payable due to the City for works performed by the Department of Public Works on behalf of the Board, were \$1,143,277 and \$5,988,758 at December 31, 2019 and 2018, respectively.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**6. Long-Term Obligations**

**A. Bonds Payable**

Bonds payable consisted of the following as of December 31:

	<b>Principal Balances</b>	
	<b>2019</b>	<b>2018</b>
0.45% sewerage service subordinate revenue bonds, series 2011 (initial average interest cost 0.95%); due in annual principal installments ranging from \$411,000 to \$491,000; final payment due December 1, 2032.	\$ 6,040,000	\$ 6,475,000
2.00% to 4.00% drainage system limited tax bonds, series 2014 (initial average interest cost 1.88%); due in annual principal installments ranging from \$535,000 to \$2,000,000; final payment due December 1, 2022.	5,850,000	7,665,000
2.00% to 5.00% sewerage service revenue bonds, series 2014 (initial average interest cost 3.86%); due in annual principal installments ranging from \$1,970,000 to \$12,970,000; final payment due June 1, 2044.	99,365,000	110,440,000
5.00% water revenue bonds, series 2014 (initial average interest cost 4.43%); due in annual principal installments ranging from \$325,000 to \$6,225,000; final payment due December 1, 2044.	95,200,000	98,000,000
4.98% water revenue bonds, series 2015 (initial average interest cost 4.38%); due in annual principal installments ranging from \$325,000 to \$6,225,000; final payment due December 1, 2045.	98,525,000	99,300,000
5.00% sewerage service revenue bonds, series 2015 (initial average interest cost 4.39%); due in annual principal installments ranging from \$325,000 to \$6,225,000; final payment due December 1, 2045.	100,000,000	100,000,000
0.95% sewerage service revenue bonds, series 2019; due in annual principal installments ranging from 4.56% to 100% of outstanding principal balance; final payment due June 1, 2040. Debt not fully drawn down at December 31, 2019.	127,550	-
	405,107,550	421,880,000
Plus: bond premiums	35,257,801	37,717,050
Total	440,365,351	459,597,050
Less: current maturities	(17,819,000)	(16,900,000)
Bond payable, long-term	\$ 422,546,351	\$ 442,697,050

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**6. Long-Term Obligations (continued)**

A. Bonds Payable (continued)

The changes in long-term debt were as follows:

	<b>2019</b>	<b>2018</b>
Balance, beginning of year	\$ 421,880,000	\$ 439,341,000
Proceeds	127,550	-
Payments	(16,900,000)	(17,461,000)
Balance, end of year	<u>\$ 405,107,550</u>	<u>\$ 421,880,000</u>

The annual requirements to amortize bonds payable as of December 31, 2019, are as follows:

<u>Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 17,819,000	\$ 19,389,996	\$ 37,208,996
2021	17,580,550	18,581,121	36,161,671
2022	16,087,000	17,836,752	33,923,752
2023	10,756,000	17,215,265	27,971,265
2024	10,821,000	16,701,987	27,522,987
2025-2029	51,749,000	76,343,779	128,092,779
2030-2034	65,470,000	62,684,666	128,154,666
2035-2039	83,390,000	44,782,375	128,172,375
2040-2044	106,740,000	21,432,000	128,172,000
2045	24,695,000	938,125	25,633,125
	<u>\$ 405,107,550</u>	<u>\$ 295,906,066</u>	<u>\$ 701,013,616</u>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**6. Long-Term Obligations (continued)**

A. Bonds Payable (continued)

The annual requirements to pay principal revenue bonds and tax bonds payable as of December 31, 2019, are as follows:

<u>Year</u>	<u>Revenue Bonds</u>	<u>Tax Bonds</u>	<u>Total</u>
2020	\$ 15,924,000	\$ 1,895,000	\$ 17,819,000
2021	15,625,550	1,955,000	17,580,550
2022	14,087,000	2,000,000	16,087,000
2023	10,756,000	-	10,756,000
2024	10,821,000	-	10,821,000
2025-2029	51,749,000	-	51,749,000
2030-2034	65,470,000	-	65,470,000
2035-2039	83,390,000	-	83,390,000
2040-2044	106,740,000	-	106,740,000
2045	24,695,000	-	24,695,000
	<u>\$ 399,257,550</u>	<u>\$ 5,850,000</u>	<u>\$ 405,107,550</u>

The indentures under which these bonds were issued provide for the establishment of restricted funds for debt service as follows:

1. Debt service funds are required for the payment of interest and principal on the revenue and tax bonds. Monthly deposits on revenue bonds, excluding bond anticipation notes, are required to be made into this fund from operations in an amount equal to 1/6 of the interest falling due on the next interest payment date, and an amount equal to 1/12 of the principal falling due on the next principal payment date. All debt service funds are administered by the Board of Liquidation. The required amount to be accumulated in this fund was \$25,431,836 and \$27,634,803 at December 31, 2019 and 2018, respectively; the accumulated balance at December 31, 2019 and 2018 was \$25,431,836 and \$27,634,803 respectively.
2. The water bonds require an amount equal to the largest amount required in any future calendar year to pay the principal of and interest on outstanding bonds. The sewer bonds require an amount equal to 125% of average aggregate debt service. The amounts required to be accumulated in this fund were \$18,407,782 at December 31, 2019 and 2018; the accumulated balance at December 31, 2019 and 2018 was \$18,407,782.

Operating revenues, net of operating expenses, are pledged as security for all revenue bond issues.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS**  
**(Continued)**

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**6. Long-term Obligations (continued)**

**B. Sewerage Service Revenue Bonds, Series 2011**

The City entered into an agreement with the Louisiana Department of Environmental Quality (LDEQ) whereby the LDEQ has committed to loan the Board \$9,000,000 to fund sewer main replacements, point repairs, replacement of associated service connections and laterals, sewer line rehabilitation by cured in-place pipe lining and manhole rehabilitation. The loan is to be advanced in incremental amounts as project costs are incurred. The indebtedness to the LDEQ will be evidenced through the Sewerage Service Subordinate Revenue Bonds, Series 2011. Upon issuance of subsequent bonds, the indebtedness was to spring from subordinate to a senior lien status. That conversion took place with the issuance of the Series 2014 bonds. Annual principal payments are due beginning November 1, 2013 continuing through December 1, 2032. Interest on the bonds is incurred at the rate of 0.45%, and the LDEQ administrative fee rate is 0.5%. Interest and administrative fee payments began on May 1, 2012 and are due semi-annually thereafter. As of December 31, 2019 and 2018, \$6,040,000 and \$6,475,000 is included as bonds payable, respectively.

**C. Series 2014 Bonds**

During 2014, the Board refunded the Series 1997, 1998, 2000, 2000B, 2001, 2002, 2003, 2004, and 2009 Sewerage bonds. The Board issued \$158,990,000 in Series 2014 Sewerage Service Revenue and Refunding Bonds with a final maturity of June 1, 2044. The bond proceeds, less issuance costs, and investments were used to refund the outstanding principle balance of the sewerage bonds in the amount of \$121,870,000. By refunding these bonds, the Board estimated \$20,696,313 in future savings related to future interest and principal payments. The Board estimated an economic gain of approximately \$18,397,306. The cost of issuance of the Series 2014 Sewerage Bonds totaled \$1,345,380, and the deferred loss on refunding was \$4,708,925. Bond proceeds of \$47,300,000 were restricted for capital projects.

During 2014, the Board refunded the Series 1998 and 2002 Water Bonds. The Board issued \$103,525,000 in Series 2014 Water Revenue and Refunding Bonds with a final maturity of December 1, 2044. The bond proceeds, less issuance costs, and investments were used to refund the outstanding principle balance of the Water Bonds in the amount of \$27,655,000. By refunding these bonds, the Board estimated \$1,359,352 in future savings related to future interest and principal payments. The Board estimated an economic gain of approximately \$2,738,262. The cost of issuance of the Series 2014 Water Bonds totaled \$1,040,131 and the deferred loss on refunding was \$34,901. Bond proceeds of \$77,000,000 were restricted for capital projects.

During 2014, the Board refunded the Series 1998 and 2002 Drainage Bonds. The Board issued \$14,900,000 in Series 2014 Drainage Refunding Bonds with a final maturity of December 1, 2022. The bond proceeds, less issuance costs, and investments were used to refund the outstanding principle balance of the Drainage Bonds in the amount of \$16,205,000. By refunding these bonds, the Board estimated \$2,968,676 in future savings related to future interest and principal payments. The Board estimated an economic gain of approximately \$2,846,558. The cost of issuance of the Series 2014 Drainage Refunding Bonds totaled \$263,828, and the deferred loss on refunding was \$347,533.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**6. Long-term Obligations (continued)**

**D. Series 2015 Bonds**

During 2015, the Board issued \$100,000,000 in Series 2015 Water Revenue Bonds with an original issue premium of \$12,686,122 and a final maturity of December 1, 2045. In addition, the Board issued \$100,000,000 in Series 2015 Sewerage Revenue Bonds with an original issue premium of \$12,826,410 and a final maturity date of December 1, 2045. Proceeds from such bonds were used to finance capital improvements.

**E. Sewerage Service Revenue Bonds, Series 2019**

The City entered into an agreement with the Louisiana Department of Environmental Quality (LDEQ) whereby the LDEQ has committed to loan the Board \$10,000,000 to fund sewer main replacements, point repairs, replacement of associated service connections and laterals, sewer line rehabilitation by cured in-place pipe lining and manhole rehabilitation. The loan is to be advanced in incremental amounts as project costs are incurred. The indebtedness to the LDEQ will be evidenced through the Sewerage Service Revenue Bonds, Series 2019. Annual principal payments are due beginning June 1, 2021 continuing through June 1, 2040. Interest on the bonds is incurred at the rate of 0.95%, and the LDEQ administrative fee rate is 0.5%. Interest and administrative fee payments began on June 1, 2020 and are due semi-annually thereafter. As of December 31, 2019, \$127,550 is included as bonds payable.

**F. Debt Service Assistance**

Debt Services Assistance Fund loan payable as of December 31, 2019 and 2018, are as follows:

	<b>2019</b>	<b>2018</b>
Balance, beginning of year	\$ 47,756,909	\$ 52,603,109
Proceeds	-	-
Payments	(5,067,022)	(4,846,200)
Balance, end of year	\$ 42,689,887	\$ 47,756,909

In July 2006, the Board and the State of Louisiana (the State) entered into a Cooperative Endeavor Agreement whereby the State agreed to lend up to \$77,465,247 from State funds on deposit in the Debt Service Assistance Fund, authorized by the Gulf Opportunity Zone Act of 2005 and Act 41 of the First Extraordinary Session of the Louisiana Legislature of 2006, to assist in payment of debt service requirements from 2006 through 2008 due to disruption of tax bases and revenue streams caused by Hurricanes Katrina and Rita. Draw downs on the loan were made as debt service payments became due. No principal or interest was payable during the initial five-year period of the loan. After the expiration of the initial five-year period, the loan shall bear interest at a fixed rate of 4.64 percent. Principal payments on the bonds began in July 2012. In July 2019, the Cooperative Endeavor Agreement was amended by the State and the Board to allow annual payments to be deferred through 2031. In addition, the outstanding loan balances for the Drainage and Water funds of the Board were assumed/transferred to the Sewerage fund. Upon the amendment, interest is payable semi-annually on January 15 and July 15 beginning July 2020. The loan will mature in January 2031. The loan may be prepaid without penalty or premium.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**6. Long-term Obligations (continued)**

**F. Debt Service Assistance (continued)**

As of December 31, 2019, debt service requirements relating to the loan is as follows:

<u>Year</u>	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2020	\$ 2,650,800	\$ 1,485,808	\$ 4,136,608
2021	2,773,797	867,542	3,641,339
2022	2,902,502	738,838	3,641,340
2023	3,037,178	604,161	3,641,339
2024	3,178,103	463,236	3,641,339
2025-2029	23,305,800	3,014,546	26,320,346
2030-2031	4,841,707	1,108,978	5,950,685
	<u>\$ 42,689,887</u>	<u>\$ 8,283,109</u>	<u>\$ 50,972,996</u>

**G. Southeast Louisiana Project**

In 2010, the Coastal Protection and Restoration Authority of Louisiana entered into agreements (SELA PPA and SELA DPA) with the Department of the Army for the Southeast Louisiana, Louisiana Project in Jefferson and Orleans Parishes (the Project). The purpose of the Project is to provide flood damage reduction and interior drainage for Orleans and Jefferson Parishes in southeast Louisiana. The agreements set forth the obligations of the federal government and non-federal sponsors, including the Board, regarding the construction and the operation, maintenance, repair, rehabilitation, and replacement of the Project. For the projects, the federal government is responsible for 65% of the project costs and the non-federal sponsors are responsible for the remaining 35%. Project costs are included in the capital assets of the Board.

Under the agreement, the Department of the Army, subject to the availability of funds appropriated by the Congress of the United States, shall design and construct specified work at 100% federal expense. The Board will be allowed to defer payment of its required non-federal contribution of funds of 35% and to pay said contribution of funds with interest over a period of not more than 30 years from the date of completion of the project or separable element of the project. The interest rate to be used in computing the interest shall be determined by the Secretary of the Treasury, taking into consideration average market yields on outstanding marketable obligations of the United States with remaining periods of maturity comparable to the payment period during the month preceding the Government fiscal year in which the first federal construction contract for such separable element is awarded to the SELA PPA, plus a premium of one-eighth of one percentage point for transaction costs. The amount due, including accrued interest, as of December 31, 2019 and 2018 is \$250,343,870 and \$227,139,545, respectively. Total amount due is expected to increase through October 2021, estimated project completion date.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**6. Long-term Obligations (continued)**

**G. Southeast Louisiana Project (continued)**

At December 31, 2019, the Board is responsible for 35% of construction costs incurred for the Project that consists of 16 contracts, grouped in 5 basins. Expected project completion date, payment start date, as well as interest rate for each basin are as follows:

Basin	Estimated Completion Date	Estimated Payment Start Date	Interest Rate
OP-2	2026	2026	3.875%
OP-3	Late 2020	2021	3.875%
OP-4	Late 2020	2021	3.875%
OP-5	Late 2020	2021	3.875%
OP-6	Late 2020	2021	3.875%

During 2012 through 2019, the Board accrued approximately \$35.5 million of interest on construction costs incurred to date. Final amount due for each basin will be determined by the Department of Army upon project completion.

As of December 31, 2019, projected debt service requirements relating to the total amount due are as follows:

Year	Principal	Interest	Total
2020	\$ -	\$ -	\$ -
2021	(636,077)	9,673,096	9,037,019
2022	3,000,579	6,036,440	9,037,019
2023	3,116,852	5,920,167	9,037,019
2024	3,237,630	5,799,389	9,037,019
2025-2029	4,032,576	68,145,173	72,177,749
2030-2034	35,542,273	43,383,640	78,925,913
2035-2039	42,983,362	35,942,551	78,925,913
2040-2044	51,982,308	26,943,604	78,925,912
2045-2049	62,865,265	16,060,648	78,925,913
2050-2054	37,722,676	5,055,161	42,777,837
2055	6,496,426	251,737	6,748,163
	<u>\$ 250,343,870</u>	<u>\$ 223,211,606</u>	<u>\$ 473,555,476</u>

*\*Note: Future payments are first applied toward interest accrued to-date since inception, resulting negative principal payments in year 2021.*

SEWERAGE AND WATER BOARD OF NEW ORLEANS

NOTES TO FINANCIAL STATEMENTS  
(Continued)

7. Defined Benefit Pension Plan

A. Plan Descriptions

The Board has a single-employer contributory retirement plan covering all full-time employees, the Pension Trust Fund (PTF). The Board's payroll for current employees covered by the PTF for the years ended December 31, 2019 and 2018 was \$53,213,682 and \$50,679,697, respectively; such amounts exclude overtime and standby payroll. As of the most recent valuation date (December 31, 2018), the PTF membership consisted of:

Retirees and terminated receiving them	1,034
Current employees:	<u>1,210</u>
Total	<u><u>2,244</u></u>

*Benefits Provided*

The benefit provisions were established by action of the Board in 1956 in accordance with Louisiana statutes. The Board retains exclusive control over the plan through the Pension Committee of the Board. Effective January 1, 1996, the plan became qualified under Internal Revenue Code Section 401(a) and thus is tax exempt.

The plan provides for retirement benefits as well as death and disability benefits. All benefits vest after five years of service. Employees who retire at or after age 65 with ten years of credited service are entitled to an annual retirement benefit, payable biweekly for life, in an amount equal to two percent of their average compensation for each year of credited service up to ten years, increasing by (1) one-half percent per year for service years over ten years, (2) an additional one-half percent per year for service years over twenty years and (3) an additional one percent per year for service years over thirty years, for a maximum of four percent for each year of credited service. Average compensation is the average annual earned compensation (prior to 2002, less \$1,200) for the period of 36 successive months of service during which the employee's compensation was the highest. Employees with thirty years or more of credited service may retire without a reduction in benefits. Employees may retire prior to age 62 without 30 years of service with a reduction in benefits of three percent for each year of age below the age of 62. If an employee leaves covered employment or dies before three years of credited service, the accumulated employee contributions plus related investment earnings are refunded to the employee or designated beneficiary.

The retirement allowance for retirees over age 65 is subject to a cost of living adjustment each January 1, provided that the member retired on or after January 1, 1984. The adjustment is based on the increase in the Consumer Price Index for all urban wage earners published by the U.S. Department of Labor but is limited to an annual maximum of two percent on the first \$10,000 of initial retirement benefits.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**7. Defined Benefit Pension Plan (continued)**

**A. Plan Descriptions (continued)**

Effective September 23, 1993, employers may transfer credit between the Board's plan and the City of New Orleans' retirement system with full credit for vested service. The Board and its employees are obligated under plan provisions to make all required contributions to the plan. The required contributions are actuarially determined. Level percentage of payroll employer contribution rates is determined using the entry age normal actuarial funding method. Employees are required to contribute four percent of their regular salaries or wages.

*Deferred Retirement Option Program (DROP)*

Beginning in 1996, the Board offered employees a "Deferred Retirement Option Plan" (DROP), an optional retirement program which allows an employee to elect to freeze his or her retirement benefits but continue to work and draw a salary for a minimum period of one year to a maximum period of five years. While continuing employment, the retirement benefits are segregated from overall plan assets available to other participants. As of December 31, 2019 and 2018, 99 and 116 employees, respectively, participated in the plan. The amount of plan assets segregated for these individuals was \$10,490,312 and \$9,774,961 as of December 31, 2019 and 2018, respectively.

**B. Funding Policy**

The actuary determined contribution requirement for the Board was 21.328% and 20.170% for 2019 and 2018. The contribution requirement for employees for the years ended December 31, 2019 and 2018 was 6.0%. The actual Board's and employees' contributions (including contributions for transferred employees from other pension plans) for the years ended December 31 were as follows:

	<b>2019</b>	<b>2018</b>
Employer	\$ 10,466,009	\$ 8,419,441
Employee	2,793,158	2,535,027
Total contributions	\$ 13,259,167	\$ 10,954,468

**C. Net Pension Liability**

The Board's Net Pension Liability was measured as of December 31, 2019 and 2018. The Total Pension Liability used to calculate the Net Pension Liability was determined as of that date.

**D. Actuarial Assumptions**

The employer's net pension liability reported for the fiscal year ending December 31, 2019 was measured as of December 31, 2019, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of December 31, 2018 and rolled forward twelve months to December 31, 2019.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**7. Defined Benefit Pension Plan (continued)**

**D. Actuarial Assumptions (continued)**

The total pension liability was determined by an actuarial valuation as of December 31, 2019 and 2018 using the following actuarial assumptions:

	<b>2019</b>	<b>2018</b>
Investment rate of return	7.00%	7.00%
Inflation	2.50%	2.00%
Salary increases including inflation	5.00%	5.00%

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by an asset allocation percentage which is based on the nature and mix of current and expected plan investments and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Pension Trust Fund's current and expected asset allocation as of December 31, 2019 are summarized in the following table:

<b>Asset Class</b>	<b>Long-Term Expected Real Rate of Return</b>
US Large Cap Equities	6.75%
US Small/Mid Cap Equities	7.25%
International Equities	4.75%
Core-Plus Fixed Income	3.75%
Hedge Funds	7.00%
Real Estate/REITs	4.00%
Cash and Equivalents	0.50%
Total	N/A

*Discount Rate*

The discount rate used to measure the total pension liability was 7% for the 2019 and 2018 plan years. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that the plan's contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the PTF's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**7. Defined Benefit Pension Plan (continued)**

E. Actuarial Assumptions (continued)

*Investment Rate of Return*

The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. For the years ended December 31, 2019 and 2018, the annual money-weighted rates of return on pension plan investments, net of pension plan investment expenses, were 15.97% and -3.31%, respectively.

*Sensitivity of the Net Pension Liability to Change in the Discount Rate*

The following presents the net pension liability of the Board as of December 31, 2019 and 2018, calculated using the discount rate of 7%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6%) or 1-percentage-point higher (8%) than the current rate.

	1% Decrease 6%	Current Discount Rate 7%	1% Increase 8%
<u>December 31, 2019</u>			
Total pension liability	\$ 377,953,504	\$ 344,719,120	\$ 316,532,054
Fiduciary net position	239,677,702	239,677,702	239,677,702
Net pension liability	138,275,802	105,041,418	76,854,352
 <u>December 31, 2018</u>			
Total pension liability	\$ 372,533,875	\$ 339,153,248	\$ 310,824,053
Fiduciary net position	215,279,783	215,279,783	215,279,783
Net pension liability	157,254,092	123,873,465	95,544,270

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**7. Defined Benefit Pension Plan (continued)**

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

	<u>Total Pension Liability</u>	<u>Plan Fiduciary Net Position</u>	<u>Net Pension Liability</u>
	(a)	(b)	(a)-(b)
Balances at December 31, 2018	\$ 339,153,248	\$ 215,279,783	\$ 123,873,465
Changes for the year:			
Service cost	4,812,452	-	4,812,452
Interest	23,277,459	-	23,277,459
Difference between expected and actual experience	-	-	-
Contributions – employer	-	10,466,009	(10,466,009)
Contributions – employee	-	2,793,158	(2,793,158)
Net investment income	-	33,662,791	(33,662,791)
Benefit payments, including refunds of employee contributions	(22,861,142)	(22,861,142)	-
Other	337,103	337,103	-
Administrative expense	-	-	-
Net changes	<u>5,565,872</u>	<u>24,397,919</u>	<u>(18,832,047)</u>
Balances at December 31, 2019	<u>\$ 344,719,120</u>	<u>\$ 239,677,702</u>	<u>\$ 105,041,418</u>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**7. Defined Benefit Pension Plan (continued)**

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

	<u>Total Pension Liability</u>	<u>Plan Fiduciary Net Position</u>	<u>Net Pension Liability</u>
	(a)	(b)	(a)-(b)
Balances at December 31, 2017	\$ 318,218,035	\$ 235,284,317	\$ 82,933,718
Changes for the year:			
Service cost	4,354,989	-	4,354,989
Interest	21,763,800	-	21,763,800
Difference between expected and actual experience	(5,689,086)	-	(5,689,086)
Changes of assumptions	23,596,233	-	23,596,233
Contributions – employer	-	8,419,441	(8,419,441)
Contributions – employee	-	2,535,027	(2,535,027)
Contributions – fines	-	-	-
Net investment income	-	(7,868,279)	7,868,279
Benefit payments, including refunds of employee contributions	(23,323,178)	(23,323,178)	-
Other	232,455	232,455	-
Administrative expense	-	-	-
Net changes	<u>20,935,213</u>	<u>(20,004,534)</u>	<u>40,939,747</u>
Balances at December 31, 2018	<u>\$ 339,153,248</u>	<u>\$ 215,279,783</u>	<u>\$ 123,873,465</u>

For the years ended December 31, 2019 and 2018, the Board recognized a pension expense of \$19,657,822 and \$21,377,012, respectively, in payroll related expense on the statements of revenues, expenses, and changes in net position.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**7. Defined Benefit Pension Plan (continued)**

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

On December 31, 2019 and 2018, the Board recorded Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
<u>December 31, 2019</u>		
Differences between expected and actual experience	\$ 6,907,204	\$ 3,655,583
Changes of assumptions	11,798,117	-
Net difference between projected and actual earnings on pension plan investments	-	3,482,725
Total	\$ 18,705,321	\$ 7,138,308
 <u>December 31, 2018</u>		
Differences between expected and actual experience	\$ 8,093,186	\$ 5,606,319
Changes of assumptions	17,697,175	-
Net difference between projected and actual earnings on pension plan investments	19,406,829	-
Total	\$ 45,197,190	\$ 5,606,319

Amounts recorded as Deferred Outflows of Resources and Deferred Inflows of Resources related to pensions will be recognized in pension expense as follows:

Year Ended December 31	Amount
2020	\$ 5,047,753
2021	4,768,325
2022	2,185,170
2023	(2,597,515)
2024	1,081,642
Thereafter	1,081,638

**G. The Board's Pension Plan Fiduciary Net Position**

A separate report on the pension trust fund is not issued.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**8. Other Post-Employment Benefits**

*Plan Description* – The Board’s post-employment benefit plan is a single-employer defined benefit plan. The Board’s post-employment medical benefits for retirees are provided through a self-insured medical plan and are made available to employees upon actual retirement.

*Participation* – All active Employees as defined in the Rules and Regulations of the Employees’ Retirement System of the Board, which is generally an employee who regularly works more than 17.5 hours per week, are eligible to participate in the plan.

*Employees covered by benefit terms* – As of the most recent valuation date (December 31, 2018), the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefit payments	659
Inactive employees entitled to but not yet receiving benefit payments	-
Active employees	1,326
	1,985

*Total OPEB Liability*

The Board’s total OPEB liability of \$195,228,094 was measured as of December 31, 2019, and was determined by an actuarial valuation as of December 31, 2018 with such results rolled-forward twelve months to December 31, 2019.

*Actuarial Assumptions and other inputs* – The total OPEB liability in the December 31, 2019 and 2018 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.5%
Salary increases	5.0%, including inflation
Healthcare cost trend rates	7.5% for FY20 decreasing 0.6% per year to an ultimate rate of 4.5% for FY25 and later years
Mortality	1994 Uninsured Pensioner (UP-94) mortality table, projected to 2002 using Scale AA, gender distinct

The discount rate used to measure the total OPEB liability as of December 31, 2019 was 2.74%. The discount rate used to determine the total OPEB liability as of December 31, 2018 was 4.10%.

Municipal Bond Rate: 2.74% as of December 31, 2019 and 4.10% as of December 31, 2018; the source of the municipal bond rate is the Bond Buyer Index of general obligation bonds with 20 years to maturity and mixed credit quality. In describing their index, the Bond Buyer notes that the bonds’ average credit quality is roughly equivalent to Moody’s Investors Service’s Aa2 rating and Standard & Poor’s Corp.’s AA.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**8. Other Post-Employment Benefits (continued)**

The actuarial assumptions used in the December 31, 2019 valuation were based on the results of ongoing evaluations of the assumptions from December 31, 2018 to December 31, 2019.

*Changes in the Total OPEB Liability 2019*

Balance at December 31, 2018	\$ 158,612,265
Changes for the year:	
Service cost	4,509,679
Interest	6,533,926
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes of assumptions or other inputs	33,088,043
Benefits payments (employer)	(7,515,819)
Other	-
Net changes	36,615,829
Balance at December 31, 2019	\$ 195,228,094

*Changes in the Total OPEB Liability 2018*

Balance at December 31, 2017	\$ 170,658,516
Changes for the year:	
Service cost	5,134,251
Interest	5,926,129
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes of assumptions or other inputs	(16,063,510)
Benefits payments (employer)	(7,043,121)
Other	-
Net changes	(12,046,251)
Balance at December 31, 2018	\$ 158,612,265

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**8. Other Post-Employment Benefits (continued)**

*Sensitivity of the total OPEB liability to changes in the discount rate* – The following presents the total OPEB liability of the Board, as well as what the Board’s total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate at December 31, 2019 and 2018:

	1% Decrease	Current Discount Rate	1% Increase
<u>December 31, 2019</u>	(1.74%)	(2.74%)	(3.74%)
Total OPEB liability	\$ 228,723,319	\$ 195,228,094	\$ 168,663,371
<u>December 31, 2018</u>	(3.10%)	(4.10%)	(5.10%)
Total OPEB liability	\$ 183,952,950	\$ 158,612,265	\$ 138,332,446

*Sensitivity of the total OPEB liability to changes in the healthcare cost trend rates* – The following presents the total OPEB liability of the Board, as well as what the Board’s total OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare trend rates at December 31, 2019 and 2018:

	1% Decrease	Current Healthcare Cost Trend Rate	1% Increase
<u>December 31, 2019</u>	(6.50%)	(7.50%)	(8.50%)
Total OPEB liability	\$ 169,506,699	\$ 195,228,094	\$ 227,476,782
<u>December 31, 2018</u>	(6.00%)	(7.00%)	(8.00%)
Total OPEB liability	\$ 138,545,322	\$ 158,612,265	\$ 183,379,817

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**8. Other Post-Employment Benefits (continued)**

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

For the year ended December 31, 2019 and 2018, the Board recognized OPEB expense of \$15,357,938 and \$7,044,502, respectively. At December 31, 2019 and 2018, the Board reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
<u>December 31, 2019</u>		
Changes of assumptions or other inputs	<u>\$ 24,816,033</u>	<u>\$ 8,031,751</u>
Total	<u>\$ 24,816,033</u>	<u>\$ 8,031,751</u>
 <u>December 31, 2018</u>		
Changes of assumptions or other inputs	<u>\$ -</u>	<u>\$ 12,047,631</u>
Total	<u>\$ -</u>	<u>\$ 12,047,631</u>

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

<u>Year Ended December 31</u>	<u>Amount</u>
2020	\$ 4,256,133
2021	4,256,133
2022	8,272,016

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

### NOTES TO FINANCIAL STATEMENTS (Continued)

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#### 9. Commitments

##### A. Capital Improvements

At December 31, 2019, the Board's budget for its ten-year capital improvements program totaled approximately \$3.0 billion, which includes \$325 million in capital expenditures for the year ending December 31, 2020 and provides for the following activities:

- Continue Joint Infrastructure Recovery Road in conjunction with City of New Orleans Department of Public Works;
- Comply with regulatory requirements under the Sewer Consent Decree;
- Complete rehabilitation of Claiborne pumping station (phase II) of Water Hammer project;
- Participate in drainage system improvements in coordination with SELA Program;
- Initiate Automated Meter Infrastructure project.

Due to certain regulatory and legislative changes, additional capital improvements will probably be required. Future capital improvement program expenditures may require the issuance of additional debt depending on the amount and timing of expenditures. As of December 31, 2019, the Board has committed or appropriated \$8,166,346 in investments for use in future capital projects and has \$4,216,858 of cash and cash equivalents restricted for future capital projects.

##### B. Self-insurance

The Board is self-insured for general liability, workers' compensation, and hospitalization benefits and claims. Settled claims have not exceeded excess coverage in any of the past three fiscal years. Hospitalization benefits are charged to payroll related expense.

General liability claims are segregated internally by "claims" and "suits" depending on the scope and type of claim and are handled by the Office of the Special Counsel and Administrative Services. Individual general liability losses have ranged from \$100 to \$7,500,000, illustrating the volatility of this exposure. The claims expense (recovery) provision for 2019 and 2018 amounted to \$(878,197) and \$(10,544,357), respectively.

Worker's compensation expense provision for 2019 and 2018 amounted to \$2,925,850 and \$4,228,002, respectively.

The medical claims for our self-insured health plan are administered by "The Health Plan," our third party administrator. The Board's expense provision in excess of employee contributions for 2019 and 2018 was \$20,704,753 and \$21,562,359, respectively, and is included in payroll related expenses.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**9. Commitments (continued)**

**A. Self-insurance**

Changes in the claims payable amount are as follows (health payments are reflected net):

	2019	2018
Beginning of Year	\$ 48,422,742	\$ 59,160,395
Current Year Claims and Estimate Change	22,752,406	15,246,004
Claim Payments	(24,341,310)	(25,983,657)
End of Year	\$ 46,833,838	\$ 48,422,742

The composition of claims payable is as follows:

	2019	2018
Short-term:		
Workers' compensation	\$ 1,737,675	\$ 2,129,709
Health insurance	1,887,000	2,225,002
Total short-term	3,624,675	4,354,711
Long-term:		
Workers' compensation	776,766	757,437
General liability	42,432,397	43,310,594
Total long-term	43,209,163	44,068,031
Total	\$ 46,833,838	\$ 48,422,742

**B. Regulatory Matters**

The Sewer System Evaluation and Rehabilitation Program (SSERP) was initially estimated to cost the Board \$408.2 million by the original Consent Decree with an end date of 2015. However, the Board has negotiated, and continues to negotiate with U.S. Environmental Protection Agency (EPA), extensions beyond the original Consent Decree deadline. Consequently, the original Consent Decree has been modified to currently provide an end date of October 2025.

The Board participates in a number of federal programs which are governed by various rules and regulations. Costs charged to the respective grant programs are subject to audit and adjustment by the grantor agencies; therefore, to the extent that the Board has not complied with the rules and regulations governing the grants, refunds of any money received and the collectability of any related receivable as of December 31, 2019 might be impaired. In management's opinion, there are no significant contingent liabilities relating to compliance with the rules and regulations governing state and federal grants; therefore, no provision has been recorded in the accompanying financial statements for such contingencies. Audits of prior years have not resulted in any significant disallowed costs or refunds. Any costs that would be disallowed would be recognized in the period agreed upon by the grantor agency and the Board.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## NOTES TO FINANCIAL STATEMENTS (Continued)

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### **10. Deferred Compensation Plan**

The Board offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. This plan, available to all employees, permits them to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. All amounts of compensation deferred under the plan, all property, and rights purchased with those amounts, and all income attributable to those amounts, property or rights are held in trust for the employees, therefore the assets of the plan are not included in these financial statements.

### **11. Budgets**

Operating and capital expenditure budgets are adopted by the Board on a basis consistent with accounting principles generally accepted in the United States. While not legally required, this budgetary information is employed as a management control device during the year. Comparison between actual and budgeted expenses is not a required presentation for an Enterprise Fund.

### **12. Property Taxes**

Property taxes are levied by the City of New Orleans. Taxes on real and personal property attach as an enforceable lien on the property as of January 1. Taxes are levied on January 1, payable on January 1, and delinquent on February 1.

The assessed value of the property is determined by an elected Assessor. The assessed value for 2019 and 2018 was \$3,868,662,170 and \$3,799,114,380, respectively. The combined tax rate dedicated for the Board for the years ended December 31, 2019 and 2018 was \$16.43 per \$1,000 of assessed valuation. These dedicated funds are available for operations, maintenance, construction, and extension of the drainage system (except for subsurface systems).

### **13. Tax Abatement Agreement**

The local government is subject to certain property tax abatements granted by the Louisiana State Board of Commerce and Industry (the "State Board"), a state entity governed by board members representing major economic groups and gubernatorial appointees. Abatements to which the government may be subject include those issued for property taxes under the Restoration Tax Abatement Program ("RTAP"). For the year ending December 31, 2019, the government participated in the Restoration Tax Abatement Program.

Under the RTAP, as authorized by Article 7, Section 21(H) of the Louisiana Constitution and Louisiana Revised Statutes 47:4311, companies that expand, restore, improve or develop an existing structure or structures in a downtown, historic, or economic development district can apply to the State Board and the local governing authority for a property tax exemption. The exemptions are granted for a 5-year term and are renewable for an additional 5-year term upon the approval of the State Board and the local governing authority. The property tax abatements have resulted in reductions of property taxes, which the tax assessor administers as a temporary reduction in the assessed value of the property involved. The abatement agreements stipulate a percentage reduction of property taxes, which can be as much as 100 percent. The local government may recapture abated taxes if a company fails to expand facilities or otherwise fail to fulfill its commitments under the agreement.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**13. Tax Abatement Agreement (continued)**

During 2019, the City Council of the City of New Orleans approved tax abatement projects with a total investment value of \$11,457,691 of which \$1,101,388 was for the Board. During 2018, the City Council of the City of New Orleans approved tax abatement projects with a total investment value of \$8,815,317 of which \$859,622 was for the Board.

**14. Segment Information**

The Board issued revenue bonds to finance its water and sewerage departments which operate the Board's water and sewerage treatment plants and distribution and collection systems. These bonds are accounted for in a single fund; however, investors in the revenue bonds rely solely on the revenue generated by the individual activities for repayment.

Summary financial information for these departments as of and for the years ended December 31 is as follows:

	Condensed Statements of Net Position			
	Water		Sewer	
	2019	2018	2019	2018
<b>Assets:</b>				
Current unrestricted assets	\$ 46,512,794	\$ 65,037,267	\$ 72,090,359	\$ 77,056,592
Restricted assets	20,310,375	28,234,279	28,685,122	40,471,502
Other assets	12,816,777	7,450,374	17,965	17,965
Property, plant and equipment	655,189,813	615,022,462	1,097,820,025	1,088,136,124
Total assets	734,829,759	715,744,382	1,198,613,471	1,205,682,183
Deferred outflows of resources:	14,518,004	15,080,978	17,020,512	17,847,392
Total assets and deferred outflows	<u>\$ 749,347,763</u>	<u>\$ 730,825,360</u>	<u>\$ 1,215,633,983</u>	<u>\$ 1,223,529,575</u>
<b>Liabilities:</b>				
Current	\$ 44,319,843	\$ 52,809,779	\$ 25,585,414	\$ 52,746,080
Current liabilities payable from restricted assets	5,181,022	5,183,196	13,980,582	14,624,635
Noncurrent liabilities	323,596,664	329,238,177	358,898,487	365,314,515
Total liabilities	<u>373,097,529</u>	<u>387,231,152</u>	<u>398,464,483</u>	<u>432,685,230</u>
Deferred inflows of resources:	<u>5,056,686</u>	<u>5,884,650</u>	<u>5,056,686</u>	<u>5,884,650</u>
<b>Net position:</b>				
Net investment in capital assets	448,792,587	411,583,789	873,723,687	860,979,966
Restricted	16,580,927	16,805,167	27,203,259	29,175,408
Unrestricted (deficit)	(94,179,966)	(90,679,398)	(88,814,132)	(105,195,679)
Total net position	<u>371,193,548</u>	<u>337,709,558</u>	<u>812,112,814</u>	<u>784,959,695</u>
Total liabilities, deferred inflows, and net position	<u>\$ 749,347,763</u>	<u>\$ 730,825,360</u>	<u>\$ 1,215,633,983</u>	<u>\$ 1,223,529,575</u>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

**14. Segment Information (continued)**

	<b>Condensed Statements of Revenues, Expenses, and Changes in Net Position</b>			
	<b>Water</b>		<b>Sewer</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
Service charges, pledged against bonds	\$ 116,644,735	\$ 92,518,944	\$ 145,026,340	\$ 115,777,622
Depreciation expense	(12,643,499)	(12,349,399)	(26,518,870)	(26,744,088)
Other operating expenses	(97,668,096)	(94,075,558)	(95,220,260)	(95,538,207)
Operating income (loss)	<u>6,333,140</u>	<u>(13,906,013)</u>	<u>23,287,210</u>	<u>(6,504,673)</u>
Nonoperating revenues (expenses):				
Contributions from other local governments	6,516,802	-	9,300,681	-
Investment earnings	729,371	422,446	653,894	342,098
Other	(5,164,398)	1,498,085	(992,927)	2,517,871
Interest expense	(94,819)	(4,363)	(133,416)	(190,583)
Total nonoperating revenues (expenses)	<u>1,986,956</u>	<u>1,916,168</u>	<u>8,828,232</u>	<u>2,669,386</u>
Capital contributions	21,414,190	28,488,912	1,174,638	13,900,807
Change in net position	29,734,286	16,499,067	33,290,080	10,065,520
Beginning net position	337,709,558	321,210,491	784,959,695	774,894,175
Transfer of Debt Service Assistance Fund loan payable	3,749,704	-	(6,136,961)	-
Ending net position	<u>\$ 371,193,548</u>	<u>\$ 337,709,558</u>	<u>\$ 812,112,814</u>	<u>\$ 784,959,695</u>

	<b>Condensed Statements of Cash Flows</b>			
	<b>Water</b>		<b>Sewer</b>	
	<b>2019</b>	<b>2018</b>	<b>2019</b>	<b>2018</b>
Net cash provided by (used in):				
Operating activities	\$ 35,824,245	\$ (13,855,629)	\$ 51,569,731	\$ 36,460,285
Noncapital financing activities	6,781,570	343,336	9,679,614	330,010
Capital and related financing activities	(56,918,526)	(22,797,065)	(72,096,991)	(57,187,256)
Investing activities	828,634	683,298	801,934	468,569
Net increase	<u>(13,484,077)</u>	<u>(35,626,060)</u>	<u>(10,045,712)</u>	<u>(19,928,392)</u>
Cash and cash equivalents:				
Beginning of year	61,148,002	96,774,062	71,350,474	91,278,866
End of year	<u>\$ 47,663,925</u>	<u>\$ 61,148,002</u>	<u>\$ 61,304,762</u>	<u>\$ 71,350,474</u>

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

### NOTES TO FINANCIAL STATEMENTS (Continued)

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#### 15. Natural Disaster

During the years ended, December 31, 2019 and 2018, the Board has cumulatively received approximately \$477.2 million and \$459.0 million, respectively, of cash reimbursements from the Federal Emergency Management Agency (FEMA). Included in accounts receivable as of December 31, 2019 and 2018 are \$284,373 and \$280,906, respectively, of reimbursements due from FEMA under the Disaster Grants program. Eligible FEMA grants totaling in excess of \$815.9 million are in various stages of the approval process and include amounts for system repairs, building repairs, vehicle and equipment repairs, and replacements, temporary power, supplies and other costs.

On June 29, 2007, the Board entered into a Cooperative Endeavor Agreement with the State of Louisiana, City of New Orleans, Louisiana, and the Louisiana Public Facilities Authority (LPFA). The LPFA agreed to issue its bonds to provide the cash capital investment to pay for capital improvements of the City of New Orleans and the Board. The establishment of the construction fund permits the Board and City of New Orleans to publicly bid contracts that are subject to a Project Worksheet that has been obligated by FEMA or for which an award letter has been received and encumber such amounts. The State of Louisiana, City of New Orleans, and Sewerage and Water Board agree that as FEMA pays any reimbursement amounts related to projects for which disbursements have been made, or the City or the Sewerage and Water Board receives monies related to the hazard mitigation grant program for which disbursements have been made from the construction fund; the full amount of such projects shall be deposited in the construction fund and used to fund additional projects until all City of New Orleans and Sewerage and Water Board improvements are completed. The total amount made available to the Board under the agreement was \$100,000,000. The agreement also permits disbursements from the construction fund for projects with a Project Worksheet that have not been obligated by FEMA, and as a result, will not be reimbursed by FEMA. The Board is not required to reimburse the construction fund for these unobligated projects. At December 31, 2019 and 2018, the Board had an outstanding obligation under the agreement of S-0- and \$11,221,710 included as a liability in due to other governments on the statements of net position, which represent amounts not yet reimbursed by FEMA for obligated projects and deposited back into the construction fund. Under the 2019 Fair Share Agreement, the liability was forgiven and the Board received all funds remaining in the Revolver account.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

### NOTES TO FINANCIAL STATEMENTS (Continued)

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#### 16. Recent Accounting Pronouncements

GASB Statement No. 84, *Fiduciary Activities*. This Statement establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. An activity meeting the criteria should be recorded in a fiduciary fund in the basic financial statements. Governments with activities meeting the criteria should present a statement of fiduciary net position and a statement of changes in fiduciary net position. An exception to that requirement is provided for a business-type activity that normally expects to hold custodial assets for three months or less. This Statement describes four fiduciary funds that should be recorded, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. Therefore, if applicable, the Board will implement this guidance in 2020.

GASB Statement No. 87, *Leases*. The objective of this Statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources. This is a significant change in accounting principles and may impact the net position of the Board. The requirements of this Statement are effective for fiscal years beginning after June 15, 2021. Therefore, as applicable, the Board will implement this guidance in 2022.

GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. This statement will improve the information that is disclosed in notes of governmental 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 requirements of this statement are effective for reporting periods beginning after June 15, 2019. The Board will implement this guidance in 2020.

GASB Statement No. 89, *Accounting for Interest Costs Incurred before the End of a Construction Period*. The Statement objectives include (1) enhancing the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period and (2) simplifying accounting for interest costs incurred before the end of a construction period. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. The Board will implement this guidance in 2021.

## SEWERAGE AND WATER BOARD OF NEW ORLEANS

### NOTES TO FINANCIAL STATEMENTS (Continued)

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#### **17. Current Operating Environment and Contributions from Other Local Governments**

The Board's Drainage System experienced a significant increase in expenditures in 2017 and into 2018 as a result of significant flooding in the New Orleans area in 2017 and the increase in the estimate for general liability claims in 2017 which has negatively impacted the Drainage System's liquidity. The Sewerage System has made advances to the Drainage System to pay for expenditures of the Drainage System. The Board is considering ways to increase revenues for the Drainage System including additional tax revenues, increased drainage fees, applying for new government grants, and the apportionment of revenues from the Sewerage and Water Systems to the Drainage System. These new sources of revenue are intended to increase revenues to a level that will cover expenditures and begin to allow the repayment of advances from the Sewerage System to the Drainage System.

In 2019, under the leadership of Mayor LaToya Cantrell, the Board received \$28 million in one-time funding through the Fair Share program. The purpose of the Fair Share funding is to improve the provision of water, sewer, and drainage services to the residents of New Orleans. In 2019, the Board continued to consider ways to increase revenues.; the Mayor was able to secure ongoing funding under House Bills 522, 617 & 43 which is anticipated to result in \$20-\$26 million in recurring tax revenue.

#### **18. Examination by Federal and State Agencies**

During 2017, the Board was notified by the Office for Inspector General (the OIG) of the U.S. Department of Homeland Security that the OIG would be conducting an audit of FEMA Public Assistance Grant Funds awarded to the Board for the period from August 29, 2005 to September 30, 2017. The objective of the audit is to determine whether the Board accounted for and expended FEMA funds according to Federal regulations and FEMA guidelines. The OIG's report, dated March 27, 2020, noted approximately \$133 million in questioned costs, along with other findings and recommendations to help strengthen program management, performance and oversight. The Board is working in conjunction with FEMA and its grantee to address the questioned costs finding and to implement operational recommendations, as deemed appropriate.

On March 19, 2020, the Louisiana Legislative Auditor (LLA) issued a report based on its review of the circumstances surrounding the Board's letting, bidding and awarding of contracts pertaining to its new billing system. The purpose of the audit was to evaluate the Board's implementation of the new billing system and oversight of its billing processes. The LLA's report noted at least \$26.3 million in estimated free water and sewer services, along with other findings and recommendations. The Board is working to make attainable changes that can improve its delivery of water and sewer services and reduce if not eliminate requirements that free water and services be provided under state law.

#### **19. Revenue Bonds Debt Service Coverage (Unaudited)**

Each of the General Bond Resolutions governing the Series 2014 Bonds and the Series 2015 Bonds have certain covenant requirements regarding net revenue available for debt service. The net revenue available for debt service in the Board's debt service coverage calculations presented in Section III, Statistical Information (Unaudited), for the year ended December 31, 2019, is increased in the amount of \$9,504,104 related to its water bonds and \$10,852,338 related to its sewer bonds, as detailed below. These amount are opined to be extraordinary, non-recurring and non-continuing expenses by a Qualified Independent Consultant (QIC) as provided for in each respective General Bond Resolutions.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**NOTES TO FINANCIAL STATEMENTS  
(Continued)**

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**19. Revenue Bonds Debt Service Coverage (Unaudited) (continued)**

	<u>Water</u>	<u>Sewer</u>
Provision for doubtful accounts	<u>\$ 9,504,104</u>	<u>\$ 10,852,338</u>

The definition of extraordinary used by the QIC varies from that used in the preparation of the financial statements under generally accepted accounting principles. It should be noted that Revenues and Operating Expenses as reported in the schedules in Section III are consistent with the terms of the General Bond Resolutions and may differ from the amounts reported in the financial statements.

The Board is in compliance with these particular covenants after consideration of the above for the year ended December 31, 2019, as provided for in the respective General Bond Resolutions.

**20. Subsequent Event**

Management has evaluated subsequent events through the date that the financial statements were available to be issued, August 18, 2020, and determined that the following item require disclosure. No events occurring after this date have been evaluated for inclusion in these financial statements.

On March 11, 2020, the World Health Organization declared the novel strain of coronavirus (COVID-19) a global health pandemic and recommended containment and mitigation measures worldwide. Subsequent to that date, the Mayor of the City of New Orleans ordered citizens and businesses to follow specific measures designed to slow the spread of the virus. In support of our customers, the Board temporarily suspended service disconnections and late fee charges and launched a Customer Care Pay Plan for customers impacted by COVID-19 and the economic downturn. The current impact is an increase in the age of customer receivables and a reduction in billed collections. The Board has also taken actions to protect the health and safety of its employees. At this time, we cannot reasonably predict the extent to which the disruption may impact business operations or financial position over the long term.

On April 22, 2020, the Board authorized and approved \$10.2 million Sewerage Service Revenue bonds, Series 2020A to meet the match requirements of a WIFIA loan (Water Infrastructure Financing and Innovation Act) and to fund additional sewer-related projects. The Sewer 2020A Series Bonds were issued and delivered on June 10, 2020.

**REQUIRED SUPPLEMENTARY INFORMATION**

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**Required Supplementary Information Under GASB Statement No. 67, 68, and 71**  
**For the years ended December 31, 2019 and 2018**

**SCHEDULE OF NET PENSION LIABILITY**

Actuarial Valuation Date December 31	Total Pension Liability	Plan Fiduciary Net Position	Employer's Net Pension Liability	Plan Fiduciary Net Position as a % of Total Pension Liability	Covered Payroll	Net Pension Liability as a Percentage of Payroll
2019	\$ 344,719,120	\$ 239,677,702	\$ 105,041,418	69.53%	\$ 53,213,682	197.40%
2018	339,153,248	215,279,783	123,873,465	63.48%	50,679,697	244.42%
2017	318,218,035	235,284,317	82,933,718	73.94%	41,822,648	198.30%
2016	305,105,919	224,356,261	80,749,658	73.53%	35,363,156	228.34%
2015	299,395,091	222,427,527	76,967,564	74.29%	33,672,902	228.57%
2014	296,244,723	236,556,671	59,688,052	79.85%	31,378,001	190.22%
2013	290,919,481	234,358,565	56,560,916	80.56%	29,706,715	190.40%

**Note to schedule:**

Until a full 10-year trend is compiled, governments should present information for those years for which information is available. History prior to 2013 is not shown in this report but is maintained in the records of the employer.

**SCHEDULE OF EMPLOYER CONTRIBUTIONS**

Year Ended	Actuarially Determined Contribution	Contributions in Relation to the Actuarial Determined Contribution	Contribution Deficiency (Excess)	Covered Payroll Contribution	Contributions as a % of Covered Payroll
2019	\$ 10,156,701	\$ 10,466,009	\$ (309,308)	\$ 53,213,682	19.67%
2018	8,435,598	8,419,441	16,157	50,679,697	16.61%
2017	10,545,867	7,239,467	3,306,400	41,822,648	17.31%
2016	11,024,398	6,407,201	4,617,197	35,363,156	18.12%
2015	10,799,993	6,506,652	4,293,341	33,672,902	19.32%
2014	11,171,823	6,055,890	5,115,933	31,378,001	19.30%
2013	11,086,546	5,946,614	5,139,932	29,706,715	20.02%
2012	9,127,658	6,287,658	2,840,000	29,074,529	21.63%
2011	9,815,606	5,564,936	4,250,670	29,774,937	18.69%
2010	8,358,739	5,140,096	3,218,643	29,670,378	17.32%

**Note to schedule:**

Valuation Date: January 1, 2019

Actuarially determined contribution rates are calculated as of January 1, 2019, which is the most recent valuation date prior to the end of the fiscal year in which contributions are reported.

Actuarial cost method	Entry age
Amortization method	Level dollar, open
Remaining amortization period	30 years
Asset valuation method	7-year smoothed market
Inflation	2.5%
Salary increases	5.0%, including inflation
Investment rate of return	7.0%, net of pension plan investment expense, including inflation
Retirement age	Earliest eligibility age, plus one year if under age 55
Mortality	1994 Uninsured Pensioner Mortality Table, projected to 2002 using Scale AA

**SCHEDULE OF INVESTMENT RETURNS**

Year Ended	Net Money-Weighted Rate of Return
2019	15.97%
2018	-3.31%
2017	10.52%
2016	5.42%
2015	-1.79%
2014	4.94%

**Note to schedule:**

This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

(Continued)

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**Required Supplementary Information Under GASB Statement No. 67, 68, and 71**  
**For the years ended December 31, 2019 and 2018**  
(continued)

**SCHEDULE OF CHANGES IN NET PENSION LIABILITY**

	2019	2018	2017	2016	2015	2014
<b>Total Pension Liability</b>						
Service cost	\$ 4,812,452	\$ 4,354,989	\$ 3,797,316	\$ 3,030,912	\$ 2,788,621	\$ 3,417,599
Interest on total pension liability	23,277,459	21,763,800	21,357,414	20,957,657	20,737,131	20,364,364
Effect of plan changes	-	-	-	-	-	-
Effect of economic/demographic gains or (losses)	-	(5,689,086)	9,734,775	834,712	(1,978,038)	(1,721,210)
Effect of assumption changes or inputs	-	23,596,233	-	-	-	-
Benefit payments	(22,861,142)	(23,323,178)	(21,777,389)	(19,112,455)	(18,397,344)	(16,735,511)
Other	337,103	232,455	-	-	-	-
<b>Net change in total pension liability</b>	<u>5,565,872</u>	<u>20,935,213</u>	<u>13,112,116</u>	<u>5,710,826</u>	<u>3,150,370</u>	<u>5,325,242</u>
<b>Total pension liability, beginning</b>	<u>339,153,248</u>	<u>318,218,035</u>	<u>305,105,919</u>	<u>299,395,093</u>	<u>296,244,723</u>	<u>290,919,481</u>
<b>Total pension liability, ending (a)</b>	<u>344,719,120</u>	<u>339,153,248</u>	<u>318,218,035</u>	<u>305,105,919</u>	<u>299,395,093</u>	<u>296,244,723</u>
<b>Plan Fiduciary Net Position</b>						
Employer contributions	10,466,009	8,419,441	7,239,467	6,407,201	6,506,652	6,055,890
Employee contributions	2,793,158	2,535,027	2,139,705	2,063,122	1,847,259	1,535,723
Investment income net of investment expenses	33,662,791	(7,868,279)	23,326,273	12,570,866	(4,085,711)	11,342,004
Benefit payments	(22,861,142)	(23,323,178)	(21,777,389)	(19,112,455)	(18,397,344)	(16,735,511)
Administrative expenses	-	-	-	-	-	-
Other	337,103	232,455	-	-	-	-
<b>Net change in plan fiduciary net position</b>	<u>24,397,919</u>	<u>(20,004,534)</u>	<u>10,928,056</u>	<u>1,928,734</u>	<u>(14,129,144)</u>	<u>2,198,106</u>
<b>Plan fiduciary net position, beginning</b>	<u>215,279,783</u>	<u>235,284,317</u>	<u>224,356,261</u>	<u>222,427,527</u>	<u>236,556,671</u>	<u>234,358,565</u>
<b>Plan fiduciary net position, ending (b)</b>	<u>\$ 239,677,702</u>	<u>\$ 215,279,783</u>	<u>\$ 235,284,317</u>	<u>\$ 224,356,261</u>	<u>\$ 222,427,527</u>	<u>\$ 236,556,671</u>
<b>Board's net pension liability, ending = (a) - (b)</b>	<u>\$ 105,041,418</u>	<u>\$ 123,873,465</u>	<u>\$ 82,933,718</u>	<u>\$ 80,749,658</u>	<u>\$ 76,967,566</u>	<u>\$ 59,688,052</u>
<b>Plan fiduciary net position as a % of total pension liability</b>	69.53%	63.48%	73.94%	73.53%	74.29%	79.85%
<b>Covered payroll</b>	\$ 53,213,682	\$ 50,679,697	\$ 41,822,648	\$ 35,363,156	\$ 33,672,902	\$ 31,378,001
<b>Board's net pension liability as a % of covered payroll</b>	197.40%	244.42%	198.30%	228.34%	228.57%	190.22%

**Notes to Schedules:**

1. This schedule is prepared using the optional format of combining the required schedules in Paragraph Nos. 46 a. and 46 b. of GASB No. 68. Until a full 10-year trend is compiled, governments should present information for those years for which information is available. Amounts recognized in the fiscal year represent changes between the current and prior measurement dates. History prior to 2015 is not shown in this report but is maintained by the employer.
2. Information is presented using a December 31, 2019 measurement date as permitted under Paragraph No. 20 of GASB No. 68.
3. City annuity and other transfers in; prior to 2018, these amounts were combined with "Benefit payments, including refunds of employee contributions".
- 4 Total compensation (not just pensionable compensation, if different) based on census used in the valuation per Q/A No. 106 of the *Guide to Implementation of GASB Statement 68* .

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**Required Supplementary Information Under GASB Statement No. 75**  
**For the years ended December 31, 2019 and 2018**

**SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY AND RELATED RATIOS**

Financial Statement Reporting Date	<u>12/31/2019</u>	<u>12/31/2018</u>
Measurement Date	<u>12/31/2019</u>	<u>12/31/2018</u>
Service cost	\$ 4,509,679	\$ 5,134,251
Interest	6,533,926	5,926,129
Changes of benefit terms	-	-
Difference between expected and actual experience	-	-
Changes of assumptions or other inputs	33,088,043	(16,063,510)
Benefit payments (employer)	<u>(7,515,819)</u>	<u>(7,043,121)</u>
Net change in total OPEB liability	36,615,829	(12,046,251)
Total OPEB liability - beginning	<u>158,612,265</u>	<u>170,658,516</u>
Total OPEB liability - ending	<u>\$ 195,228,094</u>	<u>\$ 158,612,265</u>
Covered payroll	<u>\$ 53,213,682</u>	<u>\$ 50,679,697</u>
Total OPEB liability as a percentage of covered payroll	366.88%	312.97%

**Notes to Schedule:**

1. This schedule is intended to show information for 10 years. Additional years will be displayed as they become available.
2. Information is presented using measurement date which is the same as the fiscal year end.
3. There are no assets accumulated in a trust that meets the criteria of paragraph 4 of GASB 75 for this OPEB plan.
4. *Benefit Changes:* None.

5. *Changes in assumptions or other inputs for FY2019:* Assumed Expenses, Assumed Per Capita Health Benefits Costs, Assumed Health Benefit Cost trend and Retiree Contribution trend have all been updated since the previous valuation. In addition, the discount rate was updated to 2.74% for the end of FY2019.

6. *Changes of Assumptions.* Changes of assumptions and other inputs reflect the changes in the discount rate

End of year 2018	4.10%
Beginning of year 2018	3.44%

**SUPPLEMENTARY INFORMATION**

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
 SCHEDULE OF NET POSITION BY DEPARTMENT  
 ENTERPRISE FUND  
 As of December 31, 2019 and 2018

	Water System		Sewerage System		Drainage System		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
ASSETS AND DEFERED OUTFLOWS OF RESOURCES								
Current assets:								
Cash and cash equivalents	\$ 20,394,446	\$ 31,321,022	\$ 32,676,640	\$ 30,935,972	\$ 9,191,378	\$ 1,382,352	\$ 62,262,464	\$ 63,639,346
Accounts receivable:								
Customers, net of allowance	16,642,640	19,919,941	17,413,119	20,463,721	-	-	34,055,759	40,383,662
Taxes	-	-	-	-	5,089,136	6,493,108	5,089,136	6,493,108
Grants	10,828,954	14,749,165	1,821,271	6,052,105	4,319,414	6,009,076	16,969,639	26,810,346
Miscellaneous	799,033	258,425	862,606	1,523,141	4,121,159	3,949,877	5,782,798	5,731,443
Due from (to) other internal departments	(4,818,092)	(3,872,868)	17,550,843	16,500,755	(12,732,751)	(10,632,887)	-	1,995,000
Inventory of supplies	2,380,984	2,390,127	1,635,632	1,464,006	1,120,383	1,034,569	5,136,999	4,888,702
Prepaid expenses	284,829	271,455	130,248	116,892	155,520	148,832	570,597	537,179
Total unrestricted and undesignated	46,512,794	65,037,267	72,090,359	77,056,592	11,264,239	8,384,927	129,867,392	150,478,786
Total current assets	46,512,794	65,037,267	72,090,359	77,056,592	11,264,239	8,384,927	129,867,392	150,478,786
Noncurrent assets:								
Restricted cash, cash equivalents, and investments								
Cash and cash equivalents restricted for capital projects	3,091,335	10,648,879	878,008	10,579,291	247,515	17,397	4,216,858	21,245,567
Health insurance reserve	638,113	780,233	603,855	716,803	645,032	699,598	1,887,000	2,196,634
Debt service reserve	16,580,927	16,805,167	27,203,259	29,175,408	55,432	62,010	43,839,618	46,042,585
Total restricted cash, cash equivalents, and investments	20,310,375	28,234,279	28,685,122	40,471,502	947,979	779,005	49,943,476	69,484,786
Property, plant and equipment	1,022,425,985	970,675,961	1,432,383,010	1,396,493,756	1,960,434,864	1,875,879,548	4,415,243,859	4,243,049,265
Less: accumulated depreciation	367,236,172	355,653,499	334,562,985	308,357,632	395,149,587	370,176,057	1,096,948,744	1,034,187,188
Property, plant, and equipment, net	655,189,813	615,022,462	1,097,820,025	1,088,136,124	1,565,285,277	1,505,703,491	3,318,295,115	3,208,862,077
Other assets								
Funds from/for customer deposits	12,793,827	7,427,424	-	-	-	-	12,793,827	7,427,424
Deposits	22,950	22,950	17,965	17,965	10,400	10,400	51,315	51,315
Total other assets	12,816,777	7,450,374	17,965	17,965	10,400	10,400	12,845,142	7,478,739
Total noncurrent assets	688,316,965	650,707,115	1,126,523,112	1,128,625,591	1,566,243,656	1,506,492,896	3,381,083,733	3,285,825,602
Total assets	734,829,759	715,744,382	1,198,613,471	1,205,682,183	1,577,507,895	1,514,877,823	3,510,951,125	3,436,304,388
Deferred outflows of resources:								
Deferred amounts related to net pension liability	6,235,107	15,065,730	6,235,107	15,065,730	6,235,107	15,065,730	18,705,321	45,197,190
Deferred amounts related to total OPEB liability	8,272,011	-	8,272,010	-	8,272,012	-	24,816,033	-
Deferred loss on bond refunding	10,886	15,248	2,513,395	2,781,662	75,462	128,985	2,599,743	2,925,895
Total deferred outflows of resources	14,518,004	15,080,978	17,020,512	17,847,392	14,582,581	15,194,715	46,121,097	48,123,085
Total assets and deferred outflows of resources	\$ 749,347,763	\$ 730,825,360	\$ 1,215,633,983	\$ 1,223,529,575	\$ 1,592,090,476	\$ 1,530,072,538	\$ 3,557,072,222	\$ 3,484,427,473

(Continued)

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**SCHEDULE OF NET POSITION BY DEPARTMENT, CONTINUED**  
**ENTERPRISE FUND**  
**As of December 31, 2019 and 2018**

	Water System		Sewerage System		Drainage System		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
<b>LIABILITIES, DEFERRED OUTFLOWS OF RESOURCES, AND NET POSITION</b>								
<b>Current liabilities (payable from current assets):</b>								
Accounts payable	\$ 35,116,446	\$ 32,505,962	\$ 14,760,460	\$ 39,814,320	\$ 17,826,586	\$ 28,441,519	\$ 67,703,492	\$ 100,761,801
Due to City of New Orleans	710,554	842,664	-	-	-	-	710,554	842,664
Disaster Reimbursement Revolving Loan	-	9,116,772	-	1,687,174	-	417,764	-	11,221,710
Retainers and estimates payable	455,254	4,743,155	1,409,326	3,081,481	1,654,366	2,521,087	3,518,946	10,345,723
Due to other fund	226,430	14,065	52,324	26,527	64,590	33,185	343,344	73,777
Accrued salaries	779,960	471,562	838,757	284,858	566,565	236,603	2,185,282	993,023
Claims payable	1,217,338	1,482,000	1,183,080	1,446,390	1,224,257	1,426,321	3,624,675	4,354,711
Total OPEB liability, due within one year	2,505,273	2,347,707	2,505,273	2,347,707	2,505,263	2,347,707	7,515,809	7,043,121
Debt Service Assistance Fund loan payable	-	445,347	2,650,800	4,337,950	-	283,725	2,650,800	5,067,022
Advances from federal government	2,679,202	2,775,563	1,976,305	1,976,305	-	-	4,655,507	4,751,868
Other liabilities	629,386	412,689	209,089	91,075	13,700	6,294	852,175	510,058
Total Current liabilities (payable from current assets):	44,319,843	55,157,486	25,585,414	55,093,787	23,855,327	35,714,205	93,760,584	145,965,478
<b>Current liabilities (payable from restricted assets):</b>								
Accrued interest	883,851	907,571	1,604,260	1,742,994	62,588	74,671	2,550,699	2,725,236
Bonds payable	3,825,000	3,575,000	12,099,000	11,510,000	1,895,000	1,815,000	17,819,000	16,900,000
Retainers and estimates payable	472,171	700,625	277,322	1,371,641	-	-	749,493	2,072,266
Total current liabilities (payable from restricted assets):	5,181,022	5,183,196	13,980,582	14,624,635	1,957,588	1,889,671	21,119,192	21,697,502
Total current liabilities	49,500,865	60,340,682	39,565,996	69,718,422	25,812,915	37,603,876	114,879,776	167,662,980
<b>Long-term liabilities:</b>								
Claims payable, net of current portion	3,879,578	4,351,534	4,937,099	4,672,055	34,392,486	35,044,442	43,209,163	44,068,031
Accrued vacation and sick pay	3,675,130	3,884,837	3,462,388	3,702,175	1,930,816	2,106,778	9,068,334	9,693,790
Net pension liability	35,013,806	41,291,155	35,013,806	41,291,155	35,013,806	41,291,155	105,041,418	123,873,465
Total OPEB liability, net of current portion	62,570,762	50,523,048	62,570,761	50,523,048	62,570,762	50,523,048	187,712,285	151,569,144
Bonds payable, net of current maturities	205,663,561	210,512,552	212,875,346	226,225,449	4,007,444	5,959,049	422,546,351	442,697,050
Southeast Louisiana Project liability	-	-	-	-	250,343,870	227,139,545	250,343,870	227,139,545
Debt Service Assistance Fund loan payable, net of current maturities	-	3,749,704	40,039,087	36,552,926	-	2,387,257	40,039,087	42,689,887
Customer deposits	12,793,827	12,577,640	-	-	-	-	12,793,827	12,577,640
Total long-term liabilities	323,596,664	326,890,470	358,898,487	362,966,808	388,259,184	364,451,274	1,070,754,335	1,054,308,552
Total liabilities	373,097,529	387,231,152	398,464,483	432,685,230	414,072,099	402,055,150	1,185,634,111	1,221,971,532
<b>Deferred inflows of resources:</b>								
Deferred amounts related to net pension liability	2,379,436	1,868,773	2,379,436	1,868,773	2,379,436	1,868,773	7,138,308	5,606,319
Deferred amounts related to total OPEB liability	2,677,250	4,015,877	2,677,250	4,015,877	2,677,251	4,015,877	8,031,751	12,047,631
Total deferred inflows of resources	5,056,686	5,884,650	5,056,686	5,884,650	5,056,687	5,884,650	15,170,059	17,653,950
<b>Net position:</b>								
Net investment in capital assets	448,792,587	411,583,789	873,723,687	860,979,966	1,309,286,478	1,270,807,294	2,631,802,752	2,543,371,049
Restricted for debt service	16,580,927	16,805,167	27,203,259	29,175,408	55,432	62,010	43,839,618	46,042,585
Unrestricted (deficit)	(94,179,966)	(90,679,398)	(88,814,132)	(105,195,679)	(136,380,220)	(148,736,566)	(319,374,318)	(344,611,643)
Total net position	371,193,548	337,709,558	812,112,814	784,959,695	1,172,961,690	1,122,132,738	2,356,268,052	2,244,801,991
Total liabilities, deferred inflows of resources, and net position	\$ 749,347,763	\$ 730,825,360	\$ 1,215,633,983	\$ 1,223,529,575	\$ 1,592,090,476	\$ 1,530,072,538	\$ 3,557,072,222	\$ 3,484,427,473

See accompanying independent auditors' report.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET POSITION BY DEPARTMENT**  
**ENTERPRISE FUND**

For the years ended December 31, 2019 and 2018

	Water System		Sewerage System		Drainage System		Total	
	2019	2018	2019	2018	2019	2018	2019	2018
<b>Operating revenues:</b>								
Sales of water and delinquent fees	\$ 113,339,213	\$ 90,287,081	\$ -	\$ -	\$ -	\$ -	\$ 113,339,213	\$ 90,287,081
Sewerage service charges	-	-	143,686,137	114,614,157	-	-	143,686,137	114,614,157
Plumbing inspection and license fees	293,773	319,127	288,283	329,205	-	-	582,056	648,332
Other revenues	3,011,749	1,912,736	1,051,920	834,260	1,287,446	2,940,207	5,351,115	5,687,203
<b>Total operating revenues</b>	<b>116,644,735</b>	<b>92,518,944</b>	<b>145,026,340</b>	<b>115,777,622</b>	<b>1,287,446</b>	<b>2,940,207</b>	<b>262,958,521</b>	<b>211,236,773</b>
<b>Operating Expenses:</b>								
Power and pumping	2,605,184	2,530,094	4,944,123	5,425,556	12,463,709	23,918,812	20,013,016	31,874,462
Treatment	9,639,792	9,294,004	10,048,430	13,664,971	-	-	19,688,222	22,958,975
Transmission and distribution	19,644,181	24,912,011	14,368,415	17,666,548	4,163,871	3,951,459	38,176,467	46,530,018
Customer accounts	2,703,346	2,607,756	2,703,342	2,607,781	25,098	27,739	5,431,786	5,243,276
Customer service	2,612,778	2,209,330	2,612,773	2,209,324	78,587	57,760	5,304,138	4,476,414
Administration and general	10,274,204	10,227,572	12,871,251	11,972,725	5,878,102	6,053,021	29,023,557	28,253,318
Payroll related expenses	20,223,874	18,691,737	20,123,106	18,604,235	13,491,336	12,120,609	53,838,316	49,416,581
Maintenance of general plant	14,069,152	15,533,798	8,050,655	8,061,802	5,023,033	5,217,885	27,142,840	28,813,485
Depreciation	12,643,499	12,349,399	26,518,870	26,744,088	24,993,861	24,407,703	64,156,230	63,501,190
Provision for doubtful accounts	15,171,065	7,584,815	18,036,645	13,355,926	98,485	1,476	33,306,195	20,942,217
Provision for claims	724,520	484,441	1,461,520	1,969,339	(116,680)	(9,656,464)	2,069,360	(7,202,684)
<b>Total operating expenses</b>	<b>110,311,595</b>	<b>106,424,957</b>	<b>121,739,130</b>	<b>122,282,295</b>	<b>66,099,402</b>	<b>66,100,000</b>	<b>298,150,127</b>	<b>294,807,252</b>
<b>Operating income (loss)</b>	<b>6,333,140</b>	<b>(13,906,013)</b>	<b>23,287,210</b>	<b>(6,504,673)</b>	<b>(64,811,956)</b>	<b>(63,159,793)</b>	<b>(35,191,606)</b>	<b>(83,570,479)</b>
<b>Non-operating revenues (expenses):</b>								
Three-mill tax	-	-	-	-	15,300,420	15,504,589	15,300,420	15,504,589
Six-mill tax	-	-	-	-	16,241,889	15,576,221	16,241,889	15,576,221
Nine-mill tax	-	-	-	-	24,345,982	23,570,261	24,345,982	23,570,261
Two-mill tax	-	-	-	-	35	553	35	553
Other taxes	264,768	264,567	330,217	329,965	-	-	594,985	594,532
Contributions from other local governments	6,516,802	-	9,300,681	-	20,021,658	-	35,839,141	-
Federal noncapital grants	-	78,769	48,716	45	-	-	48,716	78,814
Interest income	729,371	422,446	653,894	342,098	226,747	68,584	1,610,012	833,128
Bond issuance costs	-	-	(127,550)	-	-	-	(127,550)	-
Interest expense	(94,819)	(4,363)	(133,416)	(190,583)	-	(53,523)	(228,235)	(248,469)
Provision for grants	(5,429,166)	1,154,749	(1,244,310)	2,187,861	(557,352)	(158,969)	(7,230,828)	3,183,641
<b>Total non-operating revenues (expenses)</b>	<b>1,986,956</b>	<b>1,916,168</b>	<b>8,828,232</b>	<b>2,669,386</b>	<b>75,579,379</b>	<b>54,507,716</b>	<b>86,394,567</b>	<b>59,093,270</b>
<b>Income (expenses) before capital contributions</b>	<b>8,320,096</b>	<b>(11,989,845)</b>	<b>32,115,442</b>	<b>(3,835,287)</b>	<b>10,767,423</b>	<b>(8,652,077)</b>	<b>51,202,961</b>	<b>(24,477,209)</b>
<b>Capital contributions</b>	<b>21,414,190</b>	<b>28,488,912</b>	<b>1,174,638</b>	<b>13,900,807</b>	<b>37,674,272</b>	<b>57,898,037</b>	<b>60,263,100</b>	<b>100,287,756</b>
<b>Change in net position</b>	<b>29,734,286</b>	<b>16,499,067</b>	<b>33,290,080</b>	<b>10,065,520</b>	<b>48,441,695</b>	<b>49,245,960</b>	<b>111,466,061</b>	<b>75,810,547</b>
<b>Net position, beginning of year</b>	<b>337,709,558</b>	<b>321,210,491</b>	<b>784,959,695</b>	<b>774,894,175</b>	<b>1,122,132,738</b>	<b>1,072,886,778</b>	<b>2,244,801,991</b>	<b>2,168,991,444</b>
<b>Transfer of Debt Service Assistance Fund loan payable</b>	<b>3,749,704</b>	<b>-</b>	<b>(6,136,961)</b>	<b>-</b>	<b>2,387,257</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net position, end of year</b>	<b>\$ 371,193,548</b>	<b>\$ 337,709,558</b>	<b>\$ 812,112,814</b>	<b>\$ 784,959,695</b>	<b>\$ 1,172,961,690</b>	<b>\$ 1,122,132,738</b>	<b>\$ 2,356,268,052</b>	<b>\$ 2,244,801,991</b>

See accompanying independent auditors' report.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**SCHEDULE OF PROPERTY, PLANT AND EQUIPMENT BY DEPARTMENT**  
**As of December 31, 2019 and 2018**

	2019			
	Water	Sewer	Drainage	Total
Real estate rights, non depreciable	\$ 3,065,632	\$ 1,949,159	\$ 8,772,766	\$ 13,787,557
Power and pumping stations - buildings	74,522,290	53,795,104	268,286,304	396,603,698
Power and pumping stations - machinery	163,976,123	67,311,682	135,701,030	366,988,835
Distribution systems	373,211,294	-	-	373,211,294
Sewerage collection	-	846,599,285	-	846,599,285
Canals and subsurface drainage	-	-	1,032,784,864	1,032,784,864
Treatment plants	-	207,077,447	-	207,077,447
Connections and meters	76,287,974	31,556,254	-	107,844,228
Power transmission	10,498,353	13,079,398	13,480,136	37,057,887
General plant and buildings	154,488,081	107,490,272	84,038,801	346,017,154
<b>Total property, plant and equipment in service</b>	<b>856,049,747</b>	<b>1,328,858,601</b>	<b>1,543,063,901</b>	<b>3,727,972,249</b>
Construction in progress	166,376,238	103,524,409	417,370,963	687,271,610
<b>Total property, plant and equipment</b>	<b>1,022,425,985</b>	<b>1,432,383,010</b>	<b>1,960,434,864</b>	<b>4,415,243,859</b>
Accumulated depreciation	367,236,172	334,562,985	395,149,587	1,096,948,744
<b>Net property, plant and equipment</b>	<b>\$ 655,189,813</b>	<b>\$ 1,097,820,025</b>	<b>\$ 1,565,285,277</b>	<b>\$ 3,318,295,115</b>

	2018			
	Water	Sewer	Drainage	Total
Real estate rights, non depreciable	\$ 3,065,632	\$ 1,949,159	\$ 8,772,766	\$ 13,787,557
Power and pumping stations - buildings	74,522,290	53,795,104	268,286,304	396,603,698
Power and pumping stations - machinery	163,760,165	67,311,682	135,701,030	366,772,877
Distribution systems	362,282,823	-	-	362,282,823
Sewerage collection	-	742,695,414	-	742,695,414
Canals and subsurface drainage	-	-	916,810,550	916,810,550
Treatment plants	-	207,077,447	-	207,077,447
Connections and meters	75,358,211	31,556,254	-	106,914,465
Power transmission	10,727,059	13,079,397	13,555,173	37,361,629
General plant and buildings	142,007,198	107,490,272	84,038,828	333,536,298
<b>Total property, plant and equipment in service</b>	<b>831,723,378</b>	<b>1,224,954,729</b>	<b>1,427,164,651</b>	<b>3,483,842,758</b>
Construction in progress	138,952,583	171,539,027	448,714,897	759,206,507
<b>Total property, plant and equipment</b>	<b>970,675,961</b>	<b>1,396,493,756</b>	<b>1,875,879,548</b>	<b>4,243,049,265</b>
Accumulated depreciation	355,653,499	308,357,632	370,176,057	1,034,187,188
<b>Net property, plant and equipment</b>	<b>\$ 615,022,462</b>	<b>\$ 1,088,136,124</b>	<b>\$ 1,505,703,491</b>	<b>\$ 3,208,862,077</b>

See accompanying independent auditors' report.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**SCHEDULE OF BONDS PAYABLE**  
For the year ended December 31, 2019

	<u>Annual Interest Rates</u>	<u>Interest Payment Dates</u>	<u>Issue Date</u>	<u>Final Maturity Date</u>	<u>Outstanding as of 12/31/2018</u>	<u>New Debt in 2019</u>	<u>Payments in 2019</u>	<u>Outstanding as of 12/31/2019</u>
Drainage System Bonds, 2014 (9-Mills)	4.53%	(6/1;12/1)	12/1/2014	6/1/2022	\$ 7,665,000	\$ -	\$ 1,815,000	\$ 5,850,000
					<u>7,665,000</u>	<u>-</u>	<u>1,815,000</u>	<u>5,850,000</u>
Sewer Revenue Bonds, 2011	0.95%	(5/1; 11/1)	12/1/2011	12/1/1932	6,475,000	-	435,000	6,040,000
Sewer Revenue Bonds, 2014	4.87%	(6/1;12/1)	12/1/2014	6/1/1944	110,440,000	-	11,075,000	99,365,000
Sewer Revenue Bonds, 2015	5.00%	(6/1;12/1)	12/17/2015	12/1/1945	100,000,000	-	-	100,000,000
Sewer Revenue Bonds, 2019	0.95%	(6/1;12/1)	11/20/2019	6/1/2040	-	127,550	-	127,550
					<u>216,915,000</u>	<u>127,550</u>	<u>11,510,000</u>	<u>205,532,550</u>
Water Revenue Bonds, 2014	5.00%	(6/1;12/1)	12/1/2014	6/1/1944	98,000,000	-	2,800,000	95,200,000
Water Revenue Bonds, 2015	4.98%	(6/1;12/1)	12/17/2015	2/1/2030	99,300,000	-	775,000	98,525,000
					<u>197,300,000</u>	<u>-</u>	<u>3,575,000</u>	<u>193,725,000</u>
<b>TOTAL</b>					<u>\$ 421,880,000</u>	<u>\$ 127,550</u>	<u>\$ 16,900,000</u>	<u>\$ 405,107,550</u>

See accompanying independent auditors' report.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**SCHEDULE OF CASH RECEIPTS AND DISBURSEMENTS**  
**DEBT SERVICE AND DEBT SERVICE RESERVE**  
**REQUIRED BY BOND RESOLUTION**  
**For the year ended December 31, 2019**

	Debt Service Account				Debt Service Reserve Accounts		
	Water Revenue Bonds	Sewer Revenue Bonds	Drainage Revenue Bonds	Total	Water Revenue Bonds	Sewer Revenue Bonds	Total
Cash and investments at beginning of year	\$ 9,105,167	\$ 18,467,626	\$ 62,010	\$ 27,634,803	\$ 7,700,000	\$ 10,707,782	\$ 18,407,782
Cash receipts:							
Bond proceeds and accrued interest	-	127,550	-	127,550	-	-	-
Transfers from operating cash and debt service reserve	13,808,147	25,974,701	2,429,526	42,212,374	-	-	-
Excess debt service reserve fund applied to BANS 2006 Maturity	2,108	2,293	-	4,401	-	-	-
Total receipts	13,810,255	26,104,544	2,429,526	42,344,325	-	-	-
Cash disbursements:							
Principal and interest payments, cost of issuance and transfers	14,034,495	28,076,693	2,436,104	44,547,292	-	-	-
Total cash disbursements	14,034,495	28,076,693	2,436,104	44,547,292	-	-	-
Cash and investments at end of year	\$ 8,880,927	\$ 16,495,477	\$ 55,432	\$ 25,431,836	\$ 7,700,000	\$ 10,707,782	\$ 18,407,782

See accompanying independent auditors' report.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**CHANGES IN SELF-INSURANCE LIABILITIES BY DEPARTMENT**  
For the year ended December 31, 2019

	Beginning of Year	Current Year Claims and Estimate Change	Payments	End of Year
<b><u>WATER</u></b>				
Short-term:				
Workers' compensation	\$ 709,903	\$ 1,190,033	\$ 1,320,711	\$ 579,225
Health insurance	772,097	8,214,062	8,348,046	638,113
Total short-term	<u>1,482,000</u>	<u>9,404,095</u>	<u>9,668,757</u>	<u>1,217,338</u>
Long-term:				
Workers' compensation	252,479	6,443	-	258,922
General liability	4,099,055	(478,399)	-	3,620,656
Total long-term	<u>4,351,534</u>	<u>(471,956)</u>	<u>-</u>	<u>3,879,578</u>
Total	<u>\$ 5,833,534</u>	<u>\$ 8,932,139</u>	<u>\$ 9,668,757</u>	<u>\$ 5,096,916</u>
<b><u>SEWERAGE</u></b>				
Short-term:				
Workers' compensation	\$ 709,903	\$ 1,190,032	\$ 1,320,710	\$ 579,225
Health insurance	736,487	8,128,017	8,260,649	603,855
Total short-term	<u>1,446,390</u>	<u>9,318,049</u>	<u>9,581,359</u>	<u>1,183,080</u>
Long-term:				
Workers' compensation	252,479	6,443	-	258,922
General liability	4,419,576	258,601	-	4,678,177
Total long-term	<u>4,672,055</u>	<u>265,044</u>	<u>-</u>	<u>4,937,099</u>
Total	<u>\$ 6,118,445</u>	<u>\$ 9,583,093</u>	<u>\$ 9,581,359</u>	<u>\$ 6,120,179</u>
<b><u>DRAINAGE</u></b>				
Short-term:				
Workers' compensation	\$ 709,903	\$ 526,456	\$ 657,134	\$ 579,225
Health insurance	716,418	4,362,674	4,434,060	645,032
Total short-term	<u>1,426,321</u>	<u>4,889,130</u>	<u>5,091,194</u>	<u>1,224,257</u>
Long-term:				
Workers' compensation	252,479	6,443	-	258,922
General liability	34,791,963	(658,399)	-	34,133,564
Total long-term	<u>35,044,442</u>	<u>(651,956)</u>	<u>-</u>	<u>34,392,486</u>
Total	<u>\$ 36,470,763</u>	<u>\$ 4,237,174</u>	<u>\$ 5,091,194</u>	<u>\$ 35,616,743</u>
<b><u>TOTAL</u></b>				
Short-term:				
Workers' compensation	\$ 2,129,709	\$ 2,906,521	\$ 3,298,555	\$ 1,737,675
Health insurance	2,225,002	20,704,753	21,042,755	1,887,000
Total short-term	<u>4,354,711</u>	<u>23,611,274</u>	<u>24,341,310</u>	<u>3,624,675</u>
Long-term:				
Workers' compensation	757,437	19,329	-	776,766
General liability	43,310,594	(878,197)	-	42,432,397
Total long-term	<u>44,068,031</u>	<u>(858,868)</u>	<u>-</u>	<u>43,209,163</u>
Total	<u>\$ 48,422,742</u>	<u>\$ 22,752,406</u>	<u>\$ 24,341,310</u>	<u>\$ 46,833,838</u>

See accompanying independent auditors' report.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
SCHEDULE OF COMPENSATION, BENEFITS, AND OTHER  
PAYMENTS TO THE EXECUTIVE DIRECTOR  
For the year ended December 31, 2019**

**Ghassan Korban, Executive Director**

<u>Purpose</u>	<u>Amount</u>
Salary	\$ 273,544
Benefits-hospitalization	-
Benefits-life insurance	3,127
Benefits-retirement	16,072
Reimbursements	1,003
Conference travel	2,581
Relocation/Housing	3,923
Total	<u>\$ 300,250</u>

See accompanying independent auditors' report.

# STATISTICAL SECTION



Of our 120 pumps, 51 run on an older frequency of electricity, 25 Hertz (Hz). We produce that power ourselves using steam turbine generators, frequency changers and Electro-Motive Diesel (EMD) generators. In all, we need about 52 megawatts (MW) of power to fully run the drainage system. We can produce more than 80 MW, giving us vital redundancy in our power supply.

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
SUMMARY OF STATISTICAL INFORMATION  
December 31, 2019  
(Unaudited)

This part of the Board's Comprehensive Annual Financial report presents detailed information as a context for understanding what the information in the financial statement, note disclosure, and required supplementary information says about the Board's overall financial health.

Financial Trends:

These schedules contain trend information to help the reader understand how the Board's financial performance and well-being have changed over time.

Revenue Capacity:

These schedules contain information to help the reader assess the Board's most significant local revenue source, the property tax.

Debt Capacity:

These schedules present information to help the reader assess the affordability of the Board's current levels of outstanding debt and the Board's ability to issue additional debt in the future.

Demographic and Economic Information:

These schedules offer demographic and economic indicators to help the reader understand the environment within which the Board's financial activities take place.

Operating Information:

These schedules contain service and infrastructure data to help the reader understand how the information in the Board's financial report relates to the services the Board provides and the activities it performs.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**NET POSITION BY COMPONENT**  
**Last Ten Fiscal Years**  
**(Unaudited - accrual basis of accounting)**

	Year									
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Business-type activities										
Net investment in capital assets	\$ 2,631,802,752	\$ 2,543,371,049	\$ 2,405,073,361	\$ 2,251,197,095	\$ 2,009,322,572	\$ 2,013,060,377	\$ 1,919,436,757	\$ 1,762,389,823	\$ 1,602,767,538	\$ 1,481,320,632
Restricted for debt service	43,839,618	46,042,585	46,606,340	47,217,981	46,199,659	30,846,959	33,405,265	35,186,883	33,137,542	32,774,880
Unrestricted	(319,374,318)	(344,611,643)	(282,688,257)	(69,993,128)	27,166,084	(114,602,287)	(175,395,265)	(135,165,032)	(97,925,662)	(82,369,095)
Total business-type activities net position	<u>\$ 2,356,268,052</u>	<u>\$ 2,244,801,991</u>	<u>\$ 2,168,991,444</u>	<u>\$ 2,228,421,948</u>	<u>\$ 2,082,688,315</u>	<u>\$ 1,929,305,049</u>	<u>\$ 1,777,446,757</u>	<u>\$ 1,662,411,674</u>	<u>\$ 1,537,979,418</u>	<u>\$ 1,431,726,417</u>

Source: Audited Comprehensive Annual Financial Reports

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**CHANGES IN NET POSITION BY COMPONENT**  
**Last Ten Fiscal Years**  
**(Unaudited - accrual basis of accounting)**

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
<b>Operating revenues:</b>										
Sales of water and delinquent fees	\$ 113,339,213	\$ 90,287,081	\$ 90,464,810	\$ 83,158,940	\$ 78,007,937	\$ 70,818,255	\$ 64,398,609	\$ 60,256,304	\$ 59,890,312	\$ 55,079,772
Sewerage service charges	143,686,137	114,614,157	111,063,719	104,795,184	95,636,966	86,533,262	78,535,785	71,407,833	70,338,076	69,534,779
Plumbing inspection and license fees	582,056	648,332	588,330	638,502	610,768	678,352	643,036	687,806	758,072	746,426
Other revenue	5,351,115	5,687,203	3,451,274	4,078,380	8,290,157	5,024,480	5,119,368	4,626,276	8,581,123	4,702,753
<b>Total operating revenues</b>	<b>262,958,521</b>	<b>211,236,773</b>	<b>205,568,133</b>	<b>192,671,006</b>	<b>182,345,828</b>	<b>163,074,349</b>	<b>148,696,798</b>	<b>136,978,221</b>	<b>139,587,583</b>	<b>130,063,730</b>
<b>Operating Expenses:</b>										
Power and pumping	20,013,016	31,874,462	36,549,229	13,499,216	13,139,255	13,227,389	12,572,620	11,951,746	11,787,614	12,606,851
Treatment	19,688,222	22,958,975	23,651,907	20,300,344	18,740,637	19,527,000	18,143,049	18,906,540	18,081,523	19,029,752
Transmission and distribution	38,176,467	46,530,018	36,409,559	37,174,706	35,878,137	27,186,606	33,323,900	26,019,713	27,216,035	15,915,561
Customer accounts	5,431,786	5,245,276	4,460,155	4,151,027	3,807,405	3,514,560	3,425,934	3,334,652	3,369,643	3,314,887
Customer service	5,304,138	4,476,414	4,217,543	4,271,555	3,973,344	3,717,925	3,464,197	3,332,300	3,320,100	3,386,338
Administration and general	29,023,537	28,253,318	24,343,704	18,506,107	16,848,253	16,976,430	17,333,945	15,879,736	16,054,154	16,060,032
Payroll related	53,838,316	49,416,581	38,126,322	43,990,879	36,349,834	32,488,264	34,928,822	33,980,859	34,770,439	33,616,025
Maintenance of general plant	27,142,840	28,813,485	26,100,182	23,979,309	27,148,505	28,178,593	27,647,127	24,480,560	25,185,237	30,725,060
Depreciation	64,136,230	63,501,190	59,450,076	52,060,674	51,661,651	50,157,869	43,648,267	39,011,955	34,772,279	35,216,611
Provision for doubtful accounts	33,306,195	20,942,217	14,326,711	3,413,404	2,468,117	1,940,782	2,052,096	1,676,511	\$67,460	4,855,325
Provision for claims	2,069,360	(7,202,684)	45,272,821	6,450,805	2,435,209	2,444,878	1,801,114	130,704	(4,650,454)	3,186,714
<b>Total operating expenses</b>	<b>298,150,127</b>	<b>294,807,252</b>	<b>314,908,209</b>	<b>227,798,026</b>	<b>212,448,347</b>	<b>199,360,096</b>	<b>188,341,071</b>	<b>178,705,276</b>	<b>170,744,030</b>	<b>177,910,956</b>
<b>Operating loss</b>	<b>(35,191,606)</b>	<b>(83,570,479)</b>	<b>(109,340,076)</b>	<b>(35,127,020)</b>	<b>(29,902,519)</b>	<b>(36,285,747)</b>	<b>(39,644,273)</b>	<b>(41,727,055)</b>	<b>(31,156,447)</b>	<b>(47,847,226)</b>
<b>Non-operating revenues (expenses):</b>										
Three-mill tax	15,300,420	15,304,589	15,309,309	16,043,825	14,139,193	13,481,526	13,175,711	12,497,723	11,129,376	10,378,060
Six-mill tax	16,241,889	15,576,221	16,229,098	16,215,799	14,290,667	13,626,539	13,317,505	12,630,977	11,242,927	10,498,580
Nine-mill tax	24,345,982	23,570,261	23,881,671	23,762,398	21,421,102	20,425,388	19,962,114	18,933,290	16,855,081	15,672,791
Two-mill tax	35	533	2,735	7,526	4,960	1,193	-	-	4,870	1,045
Other taxes	594,983	594,532	593,424	564,050	581,395	572,083	494,106	278,394	316,079	333,795
Contributions from other local governments (Note 17)	35,839,141	-	-	-	-	-	-	-	-	-
Operating and maintenance grants	48,716	78,814	845	24,738	2,405	1,502	2,054,492	7,624,526	11,479,664	9,367,940
Interest income	1,610,012	3,788,898	4,273,821	4,667,470	2,511,032	\$11,263	353,630	401,387	426,870	274,323
Bond issuance costs	(127,550)	-	-	-	(1,510,657)	(2,649,339)	-	-	-	-
Interest expense	(228,235)	(3,204,239)	(3,537,336)	(32,471)	(53,518)	-	(371,349)	(737,893)	(736,876)	(1,687,603)
Recovery (provision) for grants	(7,230,828)	3,183,641	(8,906,949)	-	-	-	-	-	-	-
Forgiveness of Community Disaster Loan	-	-	-	-	-	-	30,061,368	-	-	41,438,410
<b>Total non-operating revenues (expenses)</b>	<b>86,394,567</b>	<b>59,093,270</b>	<b>47,846,618</b>	<b>61,253,335</b>	<b>51,386,579</b>	<b>46,270,155</b>	<b>79,047,577</b>	<b>51,628,404</b>	<b>50,717,989</b>	<b>86,277,341</b>
<b>Income (loss) before capital contributions</b>	<b>51,202,961</b>	<b>(24,477,209)</b>	<b>(61,493,458)</b>	<b>26,126,315</b>	<b>21,484,060</b>	<b>9,984,408</b>	<b>39,403,304</b>	<b>9,901,349</b>	<b>19,561,542</b>	<b>38,430,115</b>
<b>Capital contributions</b>	<b>60,263,100</b>	<b>100,287,756</b>	<b>96,336,075</b>	<b>119,607,318</b>	<b>131,899,206</b>	<b>141,873,884</b>	<b>114,317,636</b>	<b>114,530,907</b>	<b>115,575,107</b>	<b>48,959,148</b>
<b>Change in net position</b>	<b>111,466,061</b>	<b>75,810,547</b>	<b>34,842,617</b>	<b>145,733,633</b>	<b>153,383,266</b>	<b>151,858,292</b>	<b>153,720,940</b>	<b>124,432,256</b>	<b>135,136,649</b>	<b>87,389,263</b>
<b>Net position:</b>										
Beginning of year	2,244,801,991	2,168,991,444	2,228,421,948	2,082,688,315	1,929,305,049	1,777,446,757	1,662,411,674	1,537,979,418	1,402,842,769	1,315,453,506
Change in accounting principle	-	-	(94,273,121)	-	-	-	(38,685,837)	-	-	-
Beginning of year, as restated	2,244,801,991	2,168,991,444	2,134,148,827	2,082,688,315	1,929,305,049	1,777,446,757	1,623,725,817	1,537,979,418	1,402,842,769	1,315,453,506
<b>End of year</b>	<b>\$ 2,356,268,052</b>	<b>\$ 2,244,801,991</b>	<b>\$ 2,168,991,444</b>	<b>\$ 2,228,421,948</b>	<b>\$ 2,082,688,315</b>	<b>\$ 1,929,305,049</b>	<b>\$ 1,777,446,757</b>	<b>\$ 1,662,411,674</b>	<b>\$ 1,537,979,418</b>	<b>\$ 1,402,842,769</b>

Source: Audited Comprehensive Annual Financial Reports - Information available for ten years.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**REVENUE AND EXPENSES BY SOURCE**  
**ENTERPRISE FUND**  
**Last Ten Years**  
**(Unaudited)**

Revenues	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Charges for service	\$ 125,360,977	\$ 131,006,460	\$ 132,351,945	\$ 143,577,430	\$ 158,049,869	\$ 174,255,671	\$ 188,592,626	\$ 202,116,859	\$ 205,549,570	\$ 257,607,406
Dedicated taxes	36,549,431	39,227,384	44,061,990	46,455,330	47,533,453	49,850,962	56,022,022	55,420,078	54,651,071	55,888,291
Two-mill tax	1,045	4,870	-	-	1,193	4,960	7,526	2,735	553	35
Interest on investments	274,323	426,870	401,387	353,630	811,263	2,511,046	4,667,470	4,273,821	3,788,898	1,610,012
Contributions from local governments	-	-	-	-	-	-	-	-	-	35,839,141
Other taxes and revenue	55,842,898	20,376,866	12,529,196	37,729,334	5,598,065	7,363,300	4,667,168	4,045,543	6,360,549	5,994,814
	<u>\$ 218,028,674</u>	<u>\$ 191,042,450</u>	<u>\$ 189,344,518</u>	<u>\$ 228,115,724</u>	<u>\$ 211,993,843</u>	<u>\$ 233,985,939</u>	<u>\$ 253,956,812</u>	<u>\$ 265,859,036</u>	<u>\$ 270,350,641</u>	<u>\$ 356,939,699</u>
Expenses	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Personnel services	\$ 72,725,464	\$ 73,834,142	\$ 74,358,288	\$ 75,998,997	\$ 76,009,536	\$ 81,094,850	\$ 88,422,754	\$ 85,643,784	\$ 107,582,424	\$ 112,931,852
Services and utilities	47,125,394	42,417,785	40,621,806	44,686,711	46,739,864	46,321,849	48,095,715	56,047,431	51,770,073	49,172,289
Materials and supplies	12,535,610	23,532,818	22,906,012	20,153,886	22,067,167	28,468,671	29,354,674	54,170,680	58,214,032	36,514,199
Depreciation and amortization	35,381,030	34,850,026	39,011,955	43,648,267	50,157,869	51,661,651	52,060,674	59,450,076	63,501,190	64,156,230
Provision for doubtful accounts	4,855,325	867,460	1,676,511	2,052,096	1,940,782	2,466,131	3,413,404	14,326,711	20,942,217	33,306,195
Provision for claims	3,186,714	(4,680,454)	130,704	1,801,114	2,444,878	2,435,209	6,450,805	45,272,821	(7,202,684)	2,069,360
Provision for grants	-	-	-	-	-	-	-	8,906,949	(3,183,641)	7,230,828
Bond issuance costs	-	-	-	-	2,649,339	1,510,657	-	-	-	127,550
Interest	1,687,603	736,878	737,893	371,349	-	53,518	32,471	3,537,336	3,204,239	228,235
	<u>\$ 177,497,140</u>	<u>\$ 171,558,655</u>	<u>\$ 179,443,169</u>	<u>\$ 188,712,420</u>	<u>\$ 202,009,435</u>	<u>\$ 214,012,536</u>	<u>\$ 227,830,497</u>	<u>\$ 327,355,788</u>	<u>\$ 294,827,850</u>	<u>\$ 305,736,738</u>

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**ASSESSED AND ESTIMATED ACTUAL VALUE OF TAXABLE PROPERTY**  
**Last Ten Fiscal Years**  
**(Unaudited - amounts in thousands)**

Fiscal Year	Net Assessed Value		Total Net Assessed Value	Total Estimated Actual Value (1)	Ratio of Total Net Assessed to Total Estimated Actual Value
	Real Estate	Personal Property			
2010	\$ 2,489,813	\$ 387,334	\$ 2,877,147	\$ 21,974,841	13.1%
2011	2,584,334	385,700	2,970,034	21,974,841	13.5%
2012	2,760,973	390,952	3,151,925	21,974,841	14.3%
2013	2,920,015	413,120	3,333,135	21,974,841	15.2%
2014	3,065,164	405,514	3,470,678	21,974,841	15.8%
2015	3,202,063	431,355	3,633,418	21,974,841	16.5%
2016	3,376,001	456,454	3,832,455	30,873,272	12.4%
2017	3,481,746	471,986	3,953,732	35,475,355	11.1%
2018	3,592,392	497,655	3,789,022	35,475,355	10.7%
2019	3,652,926	527,777	3,868,662	35,475,355	10.9%

(1) Last available information is 2017

Source: City of New Orleans

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**PROPERTY TAX RATES - DIRECT AND OVERLAPPING GOVERNMENTS**  
**Last Ten Fiscal Years**  
**(Unaudited)**

Number of Mills  
(Per \$1,000 of assessed value)

<u>Fiscal Year</u>	<u>City of New Orleans</u>	<u>Orleans Levee District Eastbank</u>	<u>Algiers Levee District</u>	<u>Sewerage &amp; Water Board of New Orleans</u>	<u>Orleans Parish School Board</u>	<u>Audubon Park &amp; Zoo</u>	<u>Total</u>
2010	64.31	11.67	12.76	16.43**	44.12	3.31	140.93
2011	72.05	11.67	12.76	16.43**	44.12	3.31	148.67
2012	72.05	11.67	12.76	16.43**	43.6	3.31	148.15
2013	72.05	11.67	12.36	16.43**	44.81	3.31	136.60
2014	72.05	11.67	12.76	16.43**	45.31	3.31	147.58
2015	71.95	11.67	12.56	16.43**	45.31	3.31	149.56
2016	74.45	12.28	6.21	16.43**	45.31	3.31	145.71
2017	60.98	12.28	12.56	16.43**	45.31	3.31	134.44
2018	60.98	12.28	12.56	16.43**	45.31	3.31	134.44
2019	60.98	12.28	12.56	16.43**	45.31	3.31	134.44

Source: City of New Orleans

\*\*3 mills adopted in 1967 expires in 2046

\*\*6 mills adopted in 1978 expires in 2027

\*\*9 mills adopted in 1982 expires in 2032

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**TEN LARGEST TAXPAYERS**  
**December 31, 2019 and Ten Years Ago**  
**(Amount in thousands)**  
**(Unaudited)**

Name of Taxpayer	Type of Business	2019 Assessed Value (1)	Percentage of Total Assessed Value
Entergy Service	Electric & Gas Utilities	\$ 114,443	3.02%
Capital One Bank	Financial Institution	47,329	1.25%
Marriott Hotel	Hospitality	32,944	0.87%
Bellsouth	Telephone Utilities	31,241	0.82%
Whitney Bank Hancock Bank	Financial Institution	30,697	0.81%
Harrah's Entertainment	Hospitality & Gaming	26,582	0.70%
JP Morgan Chase Bank	Financial Institution	22,067	0.58%
Folgers Coffee	Coffee Roasting Plant	19,740	0.52%
International Rivercenter	Real Estate	18,105	0.48%
Sheraton Hotel	Hospitality	16,898	0.45%
		\$ 360,046	9.50%

Name of Taxpayer	Type of Business	2010 Assessed Value	Percentage of Total Assessed Value
Entergy Service	Electric & Gas Utilities	\$ 79,345	2.97%
Bellsouth Telecommunications	Telephone Utilities	54,414	2.04%
Harrah's Entertainment	Casino	41,733	1.56%
Capital One Bank	Financial Institution	26,719	1.00%
JP Morgan Chase Bank	Financial Institution	24,026	0.90%
Whitney National Bank	Financial Institution	22,663	0.85%
International Rivercenter	Shopping Mall; Hotel	17,466	0.65%
Marriott Hotel Properties	Hotel	14,191	0.53%
C S & M Associates	Commercial Real Estate	13,823	0.52%
Poydras Properties	Real Estate	13,313	0.50%
		\$ 307,693	11.52%

**Source:** City of New Orleans Department of Finance Bureau of the Treasury

(1) Last available information is 2018

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
PROPERTY TAX  
LEVIES AND COLLECTIONS BY THE CITY OF NEW ORLEANS  
Last Ten Fiscal Years  
(Unaudited - Amounts in Thousands)**

Fiscal Year	Total Levied (1)	Collected within Fiscal year of the Levy (1)		Collections in Subsequent Years (1) Amount	Total Collections to Date (1)	
		Amount	Percent		Amount	Percentage of Levy
Real Estate Taxes:						
2010	309,800	291,078	93.96%	16,641	307,719	99.33%
2011	339,370	320,437	94.42%	16,394	336,831	99.25%
2012	362,262	342,248	94.48%	17,109	359,357	99.20%
2013	382,902	363,026	94.81%	16,730	379,756	99.18%
2014	393,304	375,815	95.55%	13,527	389,342	98.99%
2015	422,306	397,843	94.21%	20,637	418,480	99.09%
2016	457,800	442,153	96.58%	10,381	452,534	98.85%
2017	480,924	458,767	95.39%	15,233	474,000	98.56%
2018	497,718	481,642	96.77%	-	481,642	96.77%
2019	497,718	481,642	96.77%	-	481,642	96.77%
Personal Property Taxes:						
2010	74,530	68,508	91.92%	6,022	74,530	100.00%
2011	78,996	74,204	93.93%	4,637	78,841	99.80%
2012	81,685	78,275	95.83%	3,251	81,526	99.81%
2013	87,058	84,410	96.96%	981	85,391	98.09%
2014	84,620	81,926	96.82%	797	82,723	97.76%
2015	86,961	81,773	94.03%	2,961	84,734	97.44%
2016	92,428	88,797	96.07%	966	89,763	97.12%
2017	96,441	92,123	95.52%	242	92,365	95.77%
2018	101,280	94,862	93.66%	-	94,862	93.66%
2019	101,280	94,862	93.66%	-	94,862	93.66%

Source: City of New Orleans

(1) Last available information is 2018

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**WATER AND SEWER RATES**  
**Last Ten Fiscal Years**  
**(Unaudited)**

Year	Water					Sewer	
	Rate per 1,000 Gallons					Monthly Base Rate	Rate per 1,000 Gallons
	Monthly Base Rate	First 3,000 Gallons	Next 17,000 Gallons	Next 980,000 Gallons	All Gallons Over 1,000,000		
2010	\$ 3.90	\$ 2.59	\$ 4.42	\$ 3.48	\$ 2.92	\$ 11.60	\$ 4.04
2011	\$ 4.05	\$ 2.69	\$ 4.60	\$ 3.62	\$ 3.04	\$ 11.60	\$ 4.04
2012	\$ 4.05	\$ 2.69	\$ 4.60	\$ 3.62	\$ 3.04	\$ 11.60	\$ 4.04
2013	\$ 4.91	\$ 2.96	\$ 5.06	\$ 3.98	\$ 3.34	\$ 14.04	\$ 4.44
2014	\$ 4.91	\$ 3.26	\$ 5.57	\$ 4.38	\$ 3.67	\$ 14.04	\$ 4.88
2015	\$ 5.40	\$ 3.59	\$ 6.13	\$ 4.82	\$ 4.04	\$ 15.44	\$ 5.37
2016	\$ 5.94	\$ 3.95	\$ 6.74	\$ 5.30	\$ 4.44	\$ 16.98	\$ 5.91
2017	\$ 6.53	\$ 4.35	\$ 7.41	\$ 5.83	\$ 4.88	\$ 18.68	\$ 6.50
2018	\$ 7.18	\$ 4.79	\$ 8.15	\$ 6.41	\$ 5.37	\$ 20.55	\$ 5.13
2019	\$ 7.90	\$ 5.27	\$ 8.97	\$ 7.05	\$ 5.91	\$ 22.61	\$ 5.64

Note: Rates are based on 5/8" meter, which is the standard household meter size.

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**RATIOS OF OUTSTANDING DEBT BY TYPE**  
**Last Ten Fiscal Years**

Fiscal Year	Personal Income (1) (in thousands)	Population (2)	Revenue Bonds	Special Tax Bonds	LDHH Bonds	Special Community Disaster Loan Payable	Debt Service Assistance Fund Loan	Total Debt	Percentage of Personal Income	Debt per Capita
2010	\$ 15,260,613	347,907	\$ 208,422,155	\$ 20,290,000	\$ 632,842	\$ 25,166,747	\$ 77,460,393	\$ 331,972,137	4.60%	\$ 954
2011	15,260,613	360,740	194,330,103	18,990,000	1,503,834	25,166,747	77,465,247	317,455,931	4.81%	880
2012	15,346,678	369,250	186,832,906	17,630,000	1,998,636	25,166,747	73,776,967	305,405,256	5.03%	827
2013	15,888,893	378,715	172,192,129	16,205,000	3,865	-	69,917,529	258,318,523	6.15%	682
2014	16,437,492	378,715	292,068,863	14,870,042	3,865	-	41,317,444	348,260,214	4.72%	920
2015	18,032,254	389,617	504,808,633	12,750,000	-	-	61,653,139	579,211,772	3.11%	1,487
2016	14,094,612	391,495	488,835,158	11,100,000	-	-	57,230,725	557,165,883	2.53%	1,423
2017	14,094,612	393,292	488,835,158	9,410,000	-	-	52,604,006	550,849,164	2.56%	1,401
2018	14,094,612	393,292	451,932,050	7,665,000	-	-	47,756,909	507,353,959	2.78%	1,290
2019	14,094,612 (3)	390,144	399,257,550	5,850,000	-	-	42,695,640	447,803,190	3.15%	1,148

(1) Source: Bureau of Economic Analysis.

(2) Source: [www.census.gov/popest](http://www.census.gov/popest).

(3) Most recent available is as of 2016

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
COMPUTATION OF DIRECT AND OVERLAPPING DEBT  
December 31, 2019  
(Unaudited)**

	Net Outstanding Debt	Percentage Overlapping	Overlapping Debt
	<u>                    </u>	<u>                    </u>	<u>                    </u>
Direct debt:			
Sewerage and Water Board, net of debt service funds (tax bonds only)	\$ 6,167,550	100%	\$ 6,167,550
Overlapping debt:			
City of New Orleans	502,467,981	100%	502,467,981
Audubon Park Commission	7,100,000	100%	7,100,000
Orleans Parish School Board (1)	<u>97,995,000</u>	<u>100%</u>	<u>97,995,000</u>
Total overlapping debt	<u>607,562,981</u>	<u>100%</u>	<u>607,562,981</u>
 Total direct and overlapping debt	 <u><u>\$ 613,730,531</u></u>	 <u><u>100%</u></u>	 <u><u>\$ 613,730,531</u></u>

(1) The fiscal year of the Orleans Parish School Board is June 30th; The overlapping debt is based on June 30.

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**REVENUE BONDS DEBT SERVICE COVERAGE**  
**WATER REVENUE BONDS**  
**Last Six Fiscal Years**  
**(Unaudited)**

Fiscal Year	Operating Revenue	(2) Direct Operating Expenses	Net Revenue Available for Debt Services	Debt Services Requirements			Coverage
				Principal	Interest	Total	
2014	\$ 74,221,260	\$ 66,607,501	\$ 7,613,759	\$ -	\$ 2,829,414	\$ 2,829,414	2.69
2015	82,957,551	71,168,572	11,788,979	-	3,500,000	3,500,000	3.37
2016	88,366,278	75,002,591	13,363,687	325,000	7,646,525	7,971,525	1.68
2017	94,657,534	77,838,026	16,819,508	2,540,000	10,100,550	12,640,550	1.33
2018	103,514,199	80,839,797	22,674,402	3,360,000	9,973,550	13,333,550	1.70
2019	(1) 124,155,676	82,505,413	41,650,263	3,575,000	9,819,550	13,394,550	3.11

(1) See Note 19 to the financial statements

(2) Total operating expenses less depreciation, change in total OPEB liability, net pension liability and related amortization of deferred inflows and outflows of resources.

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**REVENUE BONDS DEBT SERVICE COVERAGE**  
**SEWER REVENUE BONDS**  
**Last Six Fiscal Years**  
**(Unaudited)**

Fiscal Year	Operating Revenue	(2) Direct Operating Expenses	Net Revenue Available for Debt Services	Debt Services Requirements			Coverage
				Principal	Interest	Total	
2014	\$ 88,756,831	\$ 45,943,518	\$ 42,813,313	\$ 13,695,000	\$ 5,445,799	\$ 19,140,799	2.24
2015	98,166,699	50,196,374	47,970,325	11,644,000	4,750,603	16,394,603	2.93
2016	108,241,219	57,142,277	51,098,942	12,852,000	10,463,838	23,315,838	2.19
2017	114,318,485	64,686,410	49,632,075	13,392,000	11,413,498	24,805,498	2.00
2018	118,029,837	81,270,955	36,758,882	12,356,000	10,783,057	23,139,057	1.59
2019	(1) 155,359,848	78,709,343	76,650,505	11,510,000	10,203,963	21,713,963	3.53

(1) See Note 19 to the financial statements

(2) Total operating expenses less depreciation, change in total OPEB liability, net pension liability and related amortization of deferred inflows and outflows of resources.

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**WATER SYSTEM UNRESTRICTED CASH AND CASH EQUIVALENTS**  
**DAYS OF OPERATING AND MAINTENANCE EXPENSE AT YEAR END**  
**Last Six Fiscal Years**  
**(unaudited)**

<u>Fiscal Year</u>	<u>Cash Balance</u>	<u>One Day O&amp;M</u>	<u>Measurement</u>
2014	\$ 32,497,474	\$ 188,711	172
2015	39,253,304	194,982	201
2016	38,383,800	205,487	187
2017	29,823,726	213,255	140
2018	38,771,396	221,479	175
2019	33,211,223	226,042	147

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**SEWER SYSTEM UNRESTRICTED CASH AND CASH EQUIVALENTS**  
**DAYS OF OPERATING AND MAINTENANCE EXPENSE AT YEAR END**  
**Last Six Fiscal Years**  
**(unaudited)**

<u>Fiscal Year</u>	<u>Cash Balance</u>	<u>One Day O&amp;M</u>	<u>Measurement</u>
2014	\$ 26,736,696	\$ 130,990	204
2015	40,267,802	137,524	293
2016	62,584,566	156,554	400
2017	52,923,266	177,223	299
2018	30,935,972	222,660	139
2019	32,694,605	215,642	152

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**DEMOGRAPHIC STATISTICS**  
**Last Ten Fiscal Years**  
**(Unaudited)**

<u>Fiscal Year</u>	<u>Population(1)</u>	<u>Personal Income(2) (in thousands)</u>	<u>Per Capita Personal Income</u>	<u>Unemployment Rate (3)</u>
2010	354,850	\$ 15,260,613	\$ 35,507	8.50%
2011	343,829	\$ 13,264,235	\$ 38,578	7.30%
2012	369,250	\$ 15,346,678	\$ 41,562	5.50%
2013	378,715	\$ 15,888,893	\$ 41,955	4.20%
2014	378,715	\$ 16,437,492	\$ 43,403	7.50%
2015	389,617	\$ 18,032,254	\$ 46,282	6.00%
2016	391,495	\$ 14,094,612	\$ 36,792	5.40%
2017	393,292	\$ 14,094,612	\$ 35,838	5.41%
2018	393,292	\$ 14,094,612	\$ 35,838	3.09%
2019	390,144	\$ 14,094,612 (4)	\$ 36,127	4.50%

(1) [www.census.gov/popest](http://www.census.gov/popest).

(2) Estimates- Bureau of Economic Analysis.

(3) U.S. Bureau of Labor Statistics. Unemployment rate for the New Orleans-Metairie-Kenner, LA metropolitan area.

(4) Most recent available is 2016.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**NEW ORLEANS AREA PRINCIPAL EMPLOYERS**  
**Last Ten Fiscal Years**  
**(Unaudited)**

**Rank / Number of Employees**

	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>(1) 2019</b>
Acme Truck Line Inc.		8 / 2,500			10 / 3,100	10 / 3,100	10 / 3,100	10 / 3,100	10 / 3,100	
Al Copeland Investments	7 / 2,000	9 / 2,200	9 / 2,000							
Boh Bros. Construction	9 / 1,500									
Capital One Bank N.A.	6 / 2,150		8 / 2,150							
Catholic Charities Archdiocese of New Orleans										7 / 5,000
Dow Chemical Company	8 / 2,000		10 / 2,000							
East Jefferson General Hospital			5 / 3,150							
Entergy										3 / 13,504
Harrah's New Orleans Casino	5 / 2,200	7 / 2,700	7 / 2,200	7 / 2,700						
Hilton Hotel & Resorts	10 / 1,400				4 / 5,000	4 / 5,000	4 / 5,000	4 / 5,000	4 / 5,000	2 / 16,380
Ingalls Shipbuilding					3 / 6,000	3 / 6,000	3 / 6,000	3 / 6,000	3 / 6,000	
Lockheed Martin Manned Space Systems	4 / 2,832		7 / 2,800							
Louisiana Children's Medical Center					7 / 4,500	7 / 4,500	7 / 4,500	7 / 4,500	7 / 4,500	4 / 6,100
LSU Health Sciences Center New Orleans		2 / 7,000	3 / 5,000	2 / 7,000	2 / 7,000	2 / 7,000	2 / 7,000	2 / 7,000	2 / 7,000	8 / 4,570
LSU Public Hospital					5 / 5,000	5 / 5,000	5 / 5,000	5 / 5,000	5 / 5,000	
NASA Michoud		10 / 2,000		9 / 2,000						
North Oaks Health System				7 / 2,700						
Northrup Grumman Avondale	2 / 5,400	3 / 6,000	2 / 5,400	3 / 6,000						
Ochsner Medical Institutions / Health System	1 / 9,107	1 / 9,800	1 / 9,100	1 / 9,100	1 / 9,800	1 / 9,800	1 / 9,800	1 / 9,800	1 / 9,800	1 / 19,000
Stewart Enterprises										9 / 4,250
Tidewater										6 / 5,510
Tulane University	3 / 4,410	4 / 5,000	4 / 4,400	4 / 5,000	6 / 4,700	6 / 4,700	6 / 4,700	6 / 4,700	6 / 4,700	5 / 6,030
University of New Orleans		6 / 3,114		6 / 3,114	9 / 3,100	9 / 3,100	9 / 3,100	9 / 3,100	9 / 3,100	
US Post Office		5 / 4,000	6 / 2,900	5 / 4,000	8 / 4,000	8 / 4,000	8 / 4,000	8 / 4,000	8 / 4,000	
Weiser Security Services										10 / 3,500
West Jefferson Medical Center				10 / 1,904						

( 1 ) Source: Zippia, the Career Expert. (www.zippia.com). Employers with principal offices located in the New Orleans metropolitan area.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**CAPITAL EXPENDITURES BY DEPARTMENT**  
**ENTERPRISE FUND**  
**Last Ten Fiscal Years**  
**(Unaudited)**

<b>Year</b>	<b>Water</b>	<b>Sewer</b>	<b>Drainage</b>	<b>Total</b>
2010	32,248,119	58,682,400	51,465,065	142,395,584
2011	20,374,785	53,662,611	66,821,905	140,859,301
2012	33,888,620	60,658,231	90,435,159	184,982,010
2013	37,552,122	63,172,589	79,811,759	180,536,470
2014	46,604,884	58,870,182	152,172,018	257,647,084
2015	42,638,486	56,387,080	152,172,018	251,197,584
2016	46,106,462	48,975,578	167,051,515	262,133,555
2017	89,887,813	85,066,607	151,533,673	326,488,093
2018	72,486,981	66,802,398	108,035,976	247,325,355
2019	51,750,024	35,889,254	84,555,316	172,194,594

<sup>1</sup> Includes contributed assets

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**  
**SCHEDULE OF FUTURE DEBT PAYMENTS**  
**DECEMBER 31, 2019**  
**(Unaudited)**

		Water Revenue Bonds		
		Series 2014	Series 2015	All Bonds Issues
2020	Principal	2,930,000	895,000	3,825,000
	Interest	4,760,000	4,888,550	9,648,550
2021	Principal	3,070,000	935,000	4,005,000
	Interest	4,613,500	4,852,750	9,466,250
2022	Principal	3,225,000	970,000	4,195,000
	Interest	4,460,000	4,815,350	9,275,350
2023	Principal	2,230,000	2,155,000	4,385,000
	Interest	4,298,750	4,786,250	9,085,000
2024	Principal	2,345,000	2,260,000	4,605,000
	Interest	4,187,250	4,678,500	8,865,750
2025	Principal	2,460,000	2,375,000	4,835,000
	Interest	4,070,000	4,565,500	8,635,500
2026	Principal	2,585,000	2,490,000	5,075,000
	Interest	3,947,000	4,446,750	8,393,750
2027	Principal	2,715,000	2,615,000	5,330,000
	Interest	3,817,750	4,322,250	8,140,000
2028	Principal	2,850,000	2,750,000	5,600,000
	Interest	3,682,000	4,191,500	7,873,500
2029	Principal	2,990,000	2,885,000	5,875,000
	Interest	3,539,500	4,054,000	7,593,500
2030	Principal	3,140,000	3,030,000	6,170,000
	Interest	3,390,000	3,909,750	7,299,750
2031	Principal	3,300,000	3,180,000	6,480,000
	Interest	3,233,000	3,758,250	6,991,250
2032	Principal	3,460,000	3,345,000	6,805,000
	Interest	3,068,000	3,599,250	6,667,250
2033	Principal	3,635,000	3,510,000	7,145,000
	Interest	2,895,000	3,432,000	6,327,000
2034	Principal	3,820,000	3,680,000	7,500,000
	Interest	2,713,250	3,256,500	5,969,750
2035	Principal	4,010,000	3,865,000	7,875,000
	Interest	2,522,250	3,072,500	5,594,750
2036	Principal	4,210,000	4,060,000	8,270,000
	Interest	2,321,750	2,879,250	5,201,000
2037	Principal	4,420,000	4,265,000	8,685,000
	Interest	2,111,250	2,676,250	4,787,500
2038	Principal	4,645,000	4,475,000	9,120,000
	Interest	1,890,250	2,463,000	4,353,250
2039	Principal	4,875,000	4,700,000	9,575,000
	Interest	1,658,000	2,239,250	3,897,250
2040	Principal	5,120,000	4,930,000	10,050,000
	Interest	1,414,250	2,004,250	3,418,500
2041	Principal	5,370,000	5,185,000	10,555,000
	Interest	1,158,250	1,757,750	2,916,000
2042	Principal	5,645,000	5,435,000	11,080,000
	Interest	889,750	1,498,500	2,388,250
2043	Principal	5,925,000	5,710,000	11,635,000
	Interest	607,500	1,226,750	1,834,250
2044	Principal	6,225,000	5,995,000	12,220,000
	Interest	311,250	941,250	1,252,500
2045	Principal	-	12,830,000	12,830,000
	Interest	-	641,500	641,500
Total Principal		95,200,000	98,525,000	193,725,000
Total Interest		71,559,500	84,957,400	156,516,900
Total Future Debt Payments		<u>\$ 166,759,500</u>	<u>\$ 183,482,400</u>	<u>\$ 350,241,900</u>

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**  
**SCHEDULE OF FUTURE DEBT PAYMENTS**  
**DECEMBER 31, 2019**  
**(Unaudited)**

		Sewer Revenue Bonds				
		Series 2011	Series 2014	Series 2015	Series 2019	Total
2020	Principal	439,000	11,660,000	-		12,099,000
	Interest	26,421	4,574,075	5,000,000		9,600,496
2021	Principal	443,000	9,050,000	2,000,000	127,550	11,620,550
	Interest	24,446	4,056,325	4,950,000		9,030,771
2022	Principal	447,000	7,445,000	2,000,000		9,892,000
	Interest	22,452	3,643,950	4,850,000		8,516,402
2023	Principal	451,000	3,920,000	2,000,000		6,371,000
	Interest	20,440	3,359,825	4,750,000		8,130,265
2024	Principal	456,000	3,760,000	2,000,000		6,216,000
	Interest	18,412	3,167,825	4,650,000		7,836,237
2025	Principal	460,000	1,970,000	2,125,000		4,555,000
	Interest	16,360	3,024,575	4,546,875		7,587,810
2026	Principal	464,000	2,070,000	2,235,000		4,769,000
	Interest	14,290	2,923,575	4,437,875		7,375,740
2027	Principal	469,000	2,175,000	2,350,000		4,994,000
	Interest	12,202	2,817,450	4,323,250		7,152,902
2028	Principal	473,000	2,280,000	2,480,000		5,233,000
	Interest	10,090	2,706,075	4,202,500		6,918,665
2029	Principal	478,000	2,395,000	2,610,000		5,483,000
	Interest	7,962	2,589,200	4,075,250		6,672,412
2030	Principal	482,000	2,515,000	2,735,000		5,732,000
	Interest	5,812	2,475,881	3,941,625		6,423,318
2031	Principal	487,000	2,620,000	2,880,000		5,987,000
	Interest	3,642	2,366,762	3,801,250		6,171,654
2032	Principal	491,000	2,735,000	3,025,000		6,251,000
	Interest	1,450	2,252,969	3,653,625		5,908,044
2033	Principal		2,850,000	3,695,000		6,545,000
	Interest		2,134,287	3,485,625		5,619,912
2034	Principal		2,970,000	3,885,000		6,855,000
	Interest		2,010,613	3,296,125		5,306,738
2035	Principal		3,095,000	4,100,000		7,195,000
	Interest		1,870,125	3,096,500		4,966,625
2036	Principal		3,250,000	4,315,000		7,565,000
	Interest		1,711,500	2,886,125		4,597,625
2037	Principal		3,415,000	4,540,000		7,955,000
	Interest		1,544,875	2,664,750		4,209,625
2038	Principal		3,585,000	4,775,000		8,360,000
	Interest		1,369,875	2,431,875		3,801,750
2039	Principal		3,765,000	5,025,000		8,790,000
	Interest		1,186,125	2,186,875		3,373,000
2040	Principal		3,950,000	5,290,000		9,240,000
	Interest		993,250	1,929,000		2,922,250
2041	Principal		4,150,000	5,565,000		9,715,000
	Interest		790,750	1,657,625		2,448,375
2042	Principal		4,360,000	5,855,000		10,215,000
	Interest		578,000	1,372,125		1,950,125
2043	Principal		4,575,000	6,165,000		10,740,000
	Interest		354,625	1,071,625		1,426,250
2044	Principal		4,805,000	6,485,000		11,290,000
	Interest		120,125	755,375		875,500
2045	Principal		-	11,865,000		11,865,000
	Interest		-	296,625		296,625
Total Principal		6,040,000	99,365,000	100,000,000	127,550	205,532,550
Total Interest		183,979	54,622,637	84,312,500	-	139,119,116
Total Future Debt Payments		6,223,979	153,987,637	184,312,500	127,550	344,651,666

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**

**SCHEDULE OF FUTURE DEBT PAYMENTS**

**DECEMBER 31, 2019**

**(Unaudited)**

		<b>Drainage Special Tax Bonds</b>	
		<b>Series</b>	<b>All Bonds</b>
		<b>2014</b>	<b>Issues</b>
		<hr/>	<hr/>
2020	Principal	\$ 1,895,000	\$ 1,895,000
	Interest	140,950	140,950
2021	Principal	1,955,000	1,955,000
	Interest	84,100	84,100
2022	Principal	2,000,000	2,000,000
	Interest	<hr/> 45,000	<hr/> 45,000
Total Principal		5,850,000	5,850,000
Total Interest		<hr/> 270,050	<hr/> 270,050
Total Future Debt Payments		<hr/> <hr/> \$ 6,120,050	<hr/> <hr/> \$ 6,120,050

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE & WATER BOARD OF NEW ORLEANS**  
**SCHEDULE OF FUTURE DEBT PAYMENTS**  
**DECEMBER 31, 2019**  
**(Unaudited)**

		All Departments			
		Water	Sewer	Drainage	Total
2020	Principal	\$ 3,825,000	\$ 12,099,000	\$ 1,895,000	\$ 17,819,000
	Interest	9,648,550	9,600,496	140,950	19,389,996
2021	Principal	4,005,000	11,620,550	1,955,000	17,580,550
	Interest	9,466,250	9,030,771	84,100	18,581,121
2022	Principal	4,195,000	9,892,000	2,000,000	16,087,000
	Interest	9,275,350	8,516,402	45,000	17,836,752
2023	Principal	4,385,000	6,371,000	-	10,756,000
	Interest	9,085,000	8,130,265	-	17,215,265
2024	Principal	4,605,000	6,216,000	-	10,821,000
	Interest	8,865,750	7,836,237	-	16,701,987
2025	Principal	4,835,000	4,555,000	-	9,390,000
	Interest	8,635,500	7,587,810	-	16,223,310
2026	Principal	5,075,000	4,769,000	-	9,844,000
	Interest	8,393,750	7,375,740	-	15,769,490
2027	Principal	5,330,000	4,994,000	-	10,324,000
	Interest	8,140,000	7,152,902	-	15,292,902
2028	Principal	5,600,000	5,233,000	-	10,833,000
	Interest	7,873,500	6,918,665	-	14,792,165
2029	Principal	5,875,000	5,483,000	-	11,358,000
	Interest	7,593,500	6,672,412	-	14,265,912
2030	Principal	6,170,000	5,732,000	-	11,902,000
	Interest	7,299,750	6,423,318	-	13,723,068
2031	Principal	6,480,000	5,987,000	-	12,467,000
	Interest	6,991,250	6,171,654	-	13,162,904
2032	Principal	6,805,000	6,251,000	-	13,056,000
	Interest	6,667,250	5,908,044	-	12,575,294
2033	Principal	7,145,000	6,545,000	-	13,690,000
	Interest	6,327,000	5,619,912	-	11,946,912
2034	Principal	7,500,000	6,855,000	-	14,355,000
	Interest	5,969,750	5,306,738	-	11,276,488
2035	Principal	7,875,000	7,195,000	-	15,070,000
	Interest	5,594,750	4,966,625	-	10,561,375
2036	Principal	8,270,000	7,565,000	-	15,835,000
	Interest	5,201,000	4,597,625	-	9,798,625
2037	Principal	8,685,000	7,955,000	-	16,640,000
	Interest	4,787,500	4,209,625	-	8,997,125
2038	Principal	9,120,000	8,360,000	-	17,480,000
	Interest	4,353,250	3,801,750	-	8,155,000
2039	Principal	9,575,000	8,790,000	-	18,365,000
	Interest	3,897,250	3,373,000	-	7,270,250
2040	Principal	10,050,000	9,240,000	-	19,290,000
	Interest	3,418,500	2,922,250	-	6,340,750
2041	Principal	10,555,000	9,715,000	-	20,270,000
	Interest	2,916,000	2,448,375	-	5,364,375
2042	Principal	11,080,000	10,215,000	-	21,295,000
	Interest	2,388,250	1,950,125	-	4,338,375
2043	Principal	11,635,000	10,740,000	-	22,375,000
	Interest	1,834,250	1,426,250	-	3,260,500
2044	Principal	12,220,000	11,290,000	-	23,510,000
	Interest	1,252,500	875,500	-	2,128,000
2045	Principal	12,830,000	11,865,000	-	24,695,000
	Interest	641,500	296,625	-	938,125
Total Principal		193,725,000	205,532,550	5,850,000	405,107,550
Total Interest		156,516,900	139,119,116	270,050	295,906,066
Total Future Debt Payments		\$ 350,241,900	\$ 344,651,666	\$ 6,120,050	\$ 701,013,616

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**PROPERTY VALUE, NEW CONSTRUCTION AND BANK DEPOSITS**  
**Last Ten Fiscal Years**  
**(Unaudited)**

Fiscal Year	New Commercial Construction (1)		New Residential Construction (1)		Bank deposits (2) (in thousands)
	Number of units	Value (in thousands)	Number of units	Value (in thousands)	
2010	349	\$ 549,906	1,102	\$ 160,331	\$ 12,175,831
2011	365	266,981	1,047	161,875	10,024,118
2012					10,862,390
2013					15,738,913
2014					16,043,233
2015					11,211,760
2016					16,706,112
2017					16,701,964
2018					15,293,912
2019					16,120,898

(1) City of New Orleans (2011 latest year for which information is available).

(2) Summary of Deposits (as of June 30, 2019) - bank branches located in New Orleans, Federal Depository Insurance Corporation.

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
 ANNUAL REPORT 2019 - FOR THE CALENDAR YEAR ENDING DECEMBER 31, 2019  
 CAPITAL ASSET STATISTICS BY FUNCTION  
 Last Ten Fiscal Years  
 (Unaudited)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Water:</b>										
<b>Water Lines [miles]</b>	1,590	1,597	1,599	1,805	1,812	1,819	1,823	1,826	1,834	1,835
<b>Water Manholes</b>	29,957	30,150	30,194	30,297	30,402	30,463	30,508	30,586	30,650	30,862
<b>Water Valves</b>	29,366	29,611	29,521	29,629	29,730	29,791	29,831	29,940	29,990	30,316
<b>Fire Hydrants</b>	22,989	23,045	23,078	23,099	23,117	23,130	23,146	23,214	23,264	23,264
<b>Sewer:</b>										
<b>Sewer Lines [miles]</b>	1,518	1,519	1,520	1,536	1,547	1,561	1,568	1,585	1,602	1,605
<b>Sewer Manholes</b>	23,047	22,977	22,983	22,987	23,042	23,051	23,115	23,158	23,208	23,229

Source: Sewerage and Water Board of New Orleans.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**NUMBER OF ACTIVE EMPLOYEES**  
Last Ten Fiscal Years  
(Unaudited)

<u>Year</u>	<u>Number of Active Employees</u>
2019	1483
2018	1210
2017	1083
2016	1108
2015	1183
2014	1060
2013	1025
2012	991
2011	994
2010	974

**Source: Sewerage and Water Board of New Orleans.**

# SUPPLEMENTAL SECTION



**The treated water at our two water plants is pumped through more than 1,610 miles of mains to more than 100,000 service connections. It is delivered to approximately 300,000 people on the east bank of Orleans Parish and approximately 53,000 people on the west bank.**

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**December 31, 2019**  
**ACTUAL CAPITAL EXPENDITURES**

**WATER DEPARTMENT**

**C.P.#**      **WATERWORKS**

110	Normal Extension & Replacement	S	4,271,269.62
112	Modifications to Oak St. Raw Water Intake Station		901,937.71
122	Sycamore and Claiborne Filter Rehabilitation		1,678,870.68
156	Advanced Water Treatment (Carrollton)		824,287.95
157	Advanced Water Treatment (Algiers)		4,453,184.93
159	Water Plant Security Improvements		216,400.20
175	Water Hurricane Recovery Bonds		26,642,808.87
180	FEMA Review of Change Orders - Water		(25,494,833.96)
	<b>TOTAL WATERWORKS</b>		<b>13,493,926.00</b>

**WATER DISTRIBUTION**

214	Normal Extension & Replacement		242,955.16
239	Mains DPW Contracts		143,551.18
	<b>TOTAL WATER DISTRIBUTION</b>		<b>386,506.34</b>

**POWER PROJECTS AND GENERAL BUDGET**

600	Water Share of Power Projects		15,163,132.72
700	Water Reserve for Emergencies		5,839,119.05
800	Water Share of General Budget Items		9,063,102.51
	<b>GENERAL BUDGET</b>		<b>30,065,354.28</b>
	<b>TOTAL WATER DEPARTMENT</b>	<b>S</b>	<b>43,945,786.62</b>

NOTE: These figures do not include proration of interest expense.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**December 31, 2019**  
**ACTUAL CAPITAL EXPENDITURES**

**SEWERAGE DEPARTMENT**

<u>C.P.#</u>	<u>SEWERAGE SYSTEM</u>		
310	Ext & Replace - Gravity Mains EPA Consent Decree	\$	2,288,500.83
317	Ext & Replace - Gravity Mains EPA Consent Decree		4,424,197.85
318	Rehabilitation Gravity Sewer System		45,609.16
326	Ext. Rep to plumbing Stations EPA Consent Deree		401,304.81
339	Main in Streets Dept. Contracts		73,632.73
340	Sewerage Hurricane Recovery Bonds (FEMA)		1,709,543.73
348	Normal Extensions & Replacements		5,474,198.68
368	Wetland Assimilation		(177,511.23)
375	Sewerage Hurricane Recovery Bonds		20,801,278.22
380	FEMA Review of Change Orders-Sewer		(24,869,730.24)
	TOTAL SEWERAGE SYSTEM		<u>10,171,024.54</u>
<b><u>POWER PROJECTS AND GENERAL BUDGET</u></b>			
600	Sewerage Share of Power Projects		6,128,891.49
800	Sewerage Share of General Budget Items		9,371,624.25
	TOTAL GENERAL BUDGET		<u>15,500,515.74</u>
	TOTAL SEWERAGE DEPARTMENT	\$	<u>25,671,540.28</u>

NOTE: These figures do not include proration of interest expense.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**December 31, 2019**  
**ACTUAL CAPITAL EXPENDITURES**

**DRAINAGE DEPARTMENT**

<u>C.P.#</u>	<u>CANALS</u>		
418	Normal Extension & Replacements	S	13,152.34
439	Major Drainage Participation in DPW Projects		122,678.00
466	Louisiana Avenue Canal (SELA)		9,052,407.12
471	SELA Program Management		2,473,296.25
478	S. Claiborne-Lowerline to Monticello Street		(792,878.44)
480	FEMA Review of Change Orders-Drainage		(14,597,249.95)
496	Gen De Gaulle Drainage Canal SELA		1,044,725.20
497	Florida Ave. Canal - DPS#19 to Peoples Ave. (SELA-B)		1,700,739.69
498-00	Dwyer Intake Canal(St. Charles Canal to Dwyer DPS)(SELA)		78,423.50
	TOTAL DRAINAGE CANALS		<u>(904,706.29)</u>
	 <b><u>PUMPING STATIONS</u></b>		
511	Normal Extension & Rep./Stations		5,838,889.97
535	DPS #6 Improvements		(56,769.63)
575	Drainage Hurricane Recovery Bonds		3,361,327.66
	TOTAL DRAINAGE PUMPING STATIONS		<u>9,143,448.00</u>
	 <b><u>POWER PROJECTS AND GENERAL BUDGET</u></b>		
600	Drainage Share of Power Projects		23,985,070.94
800	Drainage Share of General Budget Items		4,155,975.75
	TOTAL GENERAL BUDGET		<u>28,141,046.69</u>
	TOTAL DRAINAGE DEPARTMENT	S	<u><u>36,379,788.40</u></u>

NOTE: These figures do not include proration of interest expense.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**December 31, 2019**  
**ACTUAL CAPITAL EXPENDITURES**

**POWER PROJECTS**

<u>C.P.#</u>	<u>POWER PROJECTS</u>	<u>Water</u>	<u>Sewerage</u>	<u>Drainage</u>	<u>Total</u>
612	Furnish Generators for Drainage Facilities	\$ -	\$ -	\$ -	\$ -
613	Modification of Steam System	-	-	-	-
624	Extension and Replacements to Electrical System	5,749.64	4,758.61	4,278.75	14,787.00
676	Modification to Power Generating System (HMGP)	15,004,113.40	5,970,863.21	23,904,157.35	44,879,133.96
676-05	Hazard Mitigation Power Program	153,269.68	153,269.67	76,634.84	383,174.19
701	Water Reserve for Emergencies	5,839,119.05	-	-	5,839,119.05
<b>TOTAL POWER PROJECTS</b>		<b><u>\$ 21,002,251.77</u></b>	<b><u>\$ 6,128,891.49</u></b>	<b><u>\$ 23,985,070.94</u></b>	<b><u>\$ 51,116,214.20</u></b>

NOTE: These figures do not include proration of interest expense.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**December 31, 2019**  
**ACTUAL CAPITAL EXPENDITURES**

<u>GENERAL BUDGET ITEMS</u>					
<u>C.P.#</u>	<u>General Budget Items</u>	<u>Water</u>	<u>Sewerage</u>	<u>Drainage</u>	<u>Total</u>
807	Improvements to Central Yard and St. Joseph St.	\$ 139,535.08	\$ 139,535.08	\$ 102,782.92	\$ 381,853.08
810	Major Equipment Purchases	9,259.33	9,259.34	9,259.33	27,778.00
812	Computer Systems Development	101,948.25	101,948.25	51,469.92	255,366.42
820	Overhead Charged to Capital	5,722,008.48	8,047,850.34	3,735,115.52	17,504,974.34
823	Purchase of Water Meters	292,823.29	292,823.26	-	585,646.55
824	Meter Boxes and Meter Parts	404,247.97	404,247.82	-	808,495.79
843	Minor Equipment Purchases	210,246.06	210,246.04	210,246.06	630,738.16
862	Fire Hydrants and Related Parts	2,176,607.50	159,287.50	-	2,335,895.00
875	Project Delivery Unit Expenses	6,426.55	6,426.62	6,426.55	19,279.72
879	Green Infrastructure	-	-	40,675.45	40,675.45
	<b>TOTAL GENERAL BUDGET ITEMS</b>	<u><u>\$ 9,063,102.51</u></u>	<u><u>\$ 9,371,624.25</u></u>	<u><u>\$ 4,155,975.75</u></u>	<u><u>\$ 22,590,702.51</u></u>

NOTE: These figures do not include proration of interest expense.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
ANALYSIS OF PUMPING AND POWER DEPARTMENT  
POWER PURCHASED AND PRODUCED  
NATURAL GAS AND FUEL OIL CONSUMED  
TEN YEARS 2010 THROUGH 2019**

YEAR	ELECTRIC POWER PURCHASED		ESTIMATED ELECTRIC POWER GENERATED BY THE S&WB		NATURAL GAS & FUEL OIL USED TO GENERATE ELECTRIC POWER			
	KW-HRS	\$ AMOUNT	KW-HRS	\$ AMOUNT	NATURAL GAS		FUEL OIL	
					MCF	\$ AMOUNT	GALLONS	\$ AMOUNT
2010	70,609,461	\$ 6,653,752	39,090,720	\$ 9,719,013	1,332,770	\$ 9,669,414	12,883	\$ 49,600
2011	70,049,094	\$ 6,180,373	27,351,600	\$ 10,721,624	1,552,330	\$ 10,721,356	315	\$ 268
2012	63,873,900	\$ 5,941,992	44,819,460	\$ 9,180,160	1,605,720	\$ 9,174,678	1,459	\$ 5,482
2013	67,980,940	\$ 6,725,811	35,005,422	\$ 11,648,150	1,830,890	\$ 11,648,148	9	\$ 34
2014	68,632,618	\$ 7,052,078	32,407,296	\$ 12,442,213	1,643,347	\$ 12,442,282	9	\$ 69
2015	73,123,062	\$ 6,660,862	29,217,520	\$ 9,483,132	1,780,110	\$ 9,483,132	0	\$ -
2016	69,736,118	\$ 7,081,051	33,182,519	\$ 9,082,988	1,854,370	\$ 9,082,988	0	\$ -
2017	70,728,827	\$ 7,969,494	32,540,663	\$ 10,183,627	1,817,671	\$ 10,183,627	84,040	\$ 252,120
2018	72,722,564	\$ 7,985,028	34,262,650	\$ 10,476,819	1,896,920	\$ 10,476,819	0	\$ -
2019	68,196,018	\$ 6,748,151	44,466,400	\$ 8,466,612	1,668,810	\$ 8,466,612	992	\$ 2,976
TOTALS	695,652,602	\$ 68,998,592	352,344,250	\$ 101,404,338	16,982,938	\$ 101,349,055	99,707	\$ 310,548

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
 POWER PURCHASED AND PRODUCED  
 NATURAL GAS AND FUEL OIL CONSUMED - 2019**

	KW-HOURS	COST
ELECTRIC POWER PURCHASE	68,196,018	\$6,748,150.53
ELECTRIC AND STEAM POWER GENERATED BY THE S. & W.B.*	44,466,400	\$8,466,611.98
TOTAL	112,662,418	\$15,214,762.51

NOTE: \*NATURAL GAS CONSUMED IN OPERATION WAS 16,688,100 CCF  
 AT A COST OF \$8,466,611.98. FUEL OIL CONSUMED WAS 992 GALLONS.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**PAY WATER CONSUMPTION (IN GALLONS)**  
**December 31, 2019**

<u>Month</u>	<u>Consumption</u>
JANUARY	1,511,988,600
FEBRUARY	1,872,329,500
MARCH	1,373,259,400
APRIL	1,476,198,400
MAY	1,134,944,700
JUNE	2,411,917,000
JULY	1,248,450,400
AUGUST	1,342,550,800
SEPTEMBER	1,248,237,500
OCTOBER	1,510,572,900
NOVEMBER	778,119,700
DECEMBER	<u>1,595,107,900</u>
 <b>Total Customer Water Metered</b>	 <b><u><u>17,503,676,800</u></u></b>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
MONTHLY WATER CHARGES COLLECTED - 2019**

<u>Months</u>	<u>Water Service Charges &amp; Fees</u>	<u>Delinquent Fees</u>	<u>Total</u>
January	\$ 7,269,033.43	\$ 145,535.74	\$ 7,414,569.17
February	6,261,339.99	136,460.51	6,397,800.50
March	6,835,909.29	98,609.24	6,934,518.53
April	8,024,726.33	182,468.61	8,207,194.94
May	8,128,278.17	148,477.84	8,276,756.01
June	7,547,372.02	150,561.76	7,697,933.78
July	9,662,101.14	194,163.07	9,856,264.21
August	8,483,471.41	190,224.48	8,673,695.89
September	8,246,458.60	171,489.98	8,417,948.58
October	10,133,619.77	192,929.64	10,326,549.41
November	9,064,554.85	213,661.54	9,278,216.39
December	8,126,347.71	141,735.87	8,268,083.58
	<u>\$ 97,783,212.71</u>	<u>\$ 1,966,318.28</u>	<u>\$ 99,749,530.99</u>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS  
MONTHLY SEWERAGE CHARGES COLLECTED - 2019**

<u>Months</u>	<u>Sewerage Service Charges</u>	<u>Delinquent Fees</u>	<u>Total</u>
January	\$ 10,283,063.57	\$ 183,074.00	\$ 10,466,137.57
February	8,856,052.16	174,247.05	9,030,299.21
March	10,920,959.77	123,706.28	11,044,666.05
April	11,750,766.03	171,100.81	11,921,866.84
May	11,709,701.42	184,362.46	11,894,063.88
June	10,666,269.90	193,563.56	10,859,833.46
July	12,418,687.32	240,120.23	12,658,807.55
August	11,484,226.89	244,490.68	11,728,717.57
September	11,249,670.91	225,192.10	11,474,863.01
October	13,327,186.70	246,420.26	13,573,606.96
November	7,943,403.22	256,513.62	8,199,916.84
December	11,698,149.56	180,495.45	11,878,645.01
	<u>\$ 132,308,137.45</u>	<u>\$ 2,423,286.50</u>	<u>\$ 134,731,423.95</u>

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

SEWERAGE AND WATER BOARD OF NEW ORLEANS  
December 31, 2019

## CARROLLTON TURBIDITIES

	River (NTU)					Effluent Settling Reservoirs (NTU)					Filters (NTU)				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Maximum	273	271	345	242	174	6.9	14	10	17	12	0.21	0.31	0.33	0.34	0.33
Minimum	7	13	6	8	12	1.0	0.9	1.0	0.7	0.8	0.07	0.07	0.04	0.05	0.04
Average	71	63	86	62	55	2.3	2.9	2.8	2.5	2.5	0.10	0.13	0.13	0.13	0.13

TABLE II

## CARROLLTON ALKALINITIES PARTS PER MILLION

	River					Effluent Settling Reservoirs					Filters				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Maximum	160	201	161	164	147	160	205	152	152	142	190	230	188	184	162
Minimum	75	81	95	65	81	56	60	74	57	68	82	87	104	86	100
Average	116	130	124	117	118	105	118	113	105	107	128	146	139	131	136

TABLE II A

## CARROLLTON HARDNESS PARTS PER MILLION

	NON-CARBONATE HARDNESS										TOTAL HARDNESS									
	RIVER					FILTERS					RIVER					FILTERS				
	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019	2015	2016	2017	2018	2019
Maximum	90	86	79	68	72	81	102	132	75	87	233	272	211	229	198	245	304	245	235	224
Minimum	14	12	21	11	15	12	11	20	14	11	106	108	127	98	100	115	127	142	122	140
Average	43	40	42	37	37	51	48	49	45	46	159	169	166	154	155	178	197	189	176	182

TABLE III

## CARROLLTON BACTERIAL CHARACTERISTICS TOTAL COLIFORM ANALYSIS

2019	River	Plant Tap	Distribution System
Maximum (Colonies / 100 ml)	1,260	1	9
Minimum (Colonies / 100 ml)	86	0	0
Average (colonies / 100 ml)	540	0	0
Number of Samples	240	365	1,897
Number of Samples Negative	0	364	1,890
Number of Samples Positive	240	1	7*

\* None of these 7 total coliform positive samples was *E. coli* positive, and none resulted in a violation of the Total Coliform Rule.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

TABLE IV-A

PRINCIPLE RESULTS OF OPERATION OF THE G3 CONVENTIONAL UNIT AT THE  
CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING: December 31, 2019

1	2	3	4	5	6	7	8	9	10	11	12	13
Month		Volume of Water Treated During Month (Millions of Gallons)	Volume of Water Treated (Millions of Gallons Per Day)	Total Pounds of Polymer Used at Intake During Month	Polymer Used at Intake (ppm)	Total Pounds of Polymer Used in Plant During Month	Polymer Used in Plant (ppm)	Total Pounds of Pure Iron (Fe) Used During Month	Pure Iron (Fe) (ppm)	Turbidity of River Water (NTU)	Alkalinity of River Water (ppm as CaCO <sub>3</sub> )	Turbidity of Unit Effluent (NTU)
January	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
February	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
March	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
April	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
May	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
June	Max		83.00		0.00		5.17		5.59	88	134	3.8
	Min	1,477.38	45.88	0	0.00	56,784	4.36	64,213	4.94	22	112	0.9
	Avg		77.76		0.00		4.60		5.21	55	119	1.7
July	Max		85.54		0.00		9.17		10.41	39	134	4.3
	Min	2,439.88	72.00	0	0.00	75,268	2.96	85,327	3.35	15	112	0.8
	Avg		78.71		0.00		3.70		4.19	25	126	1.5
August	Max		82.00		0.00		3.28		3.74	36	138	1.8
	Min	2,392.00	73.29	0	0.00	60,614	2.53	68,891	2.88	12	123	0.8
	Avg		77.16		0.00		3.04		3.46	25	130	1.3
September	Max		85.58		0.00		2.94		3.36	71	147	2.8
	Min	2,385.78	74.29	0	0.00	51,294	2.43	58,272	2.78	22	123	1.2
	Avg		79.53		0.00		2.58		2.93	43	130	1.8
October	Max		84.29		0.00		3.72		4.23	174	143	3.7
	Min	2,486.21	77.04	0	0.00	65,981	2.47	74,884	2.81	17	119	1.1
	Avg		80.20		0.00		3.18		3.61	79	134	2.1
November	Max		86.83		0.00		4.21		4.77	101	144	4.0
	Min	2,452.53	78.17	0	0.00	74,031	3.28	83,991	3.72	33	126	1.2
	Avg		81.75		0.00		3.62		4.11	57	134	2.2
December	Max		94.13		0.00		4.90		5.56	107	145	4.9
	Min	2,514.54	77.71	0	0.00	91,038	3.92	103,146	4.43	32	112	1.1
	Avg		81.11		0.00		4.35		4.92	63	128	2.3
Annual	Total	16,148.32		0		475,011		538,725				
	Max	2,514.54	94.13	0	0.00	91,038	9.17	103,146	10.41	174	147	4.9
	Min	0.00	0.00	0	0.00	51,294	2.43	58,272	2.78	12	81	0.8
	Avg	1,345.69	79.55	0	0.00	67,859	3.53	76,961	4.00	55	118	1.8

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

TABLE IV-B

**PRINCIPLE RESULTS OF OPERATION OF THE G4 CONVENTIONAL UNIT AT THE  
CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING: December 31, 2019**

1	2	3	4	5	6	7	8	9	10	11	12	13
Month		Volume of Water Treated During Month (Millions of Gallons)	Volume of Water Treated (Millions of Gallons Per Day)	Total Pounds of Polymer Used at Intake During Month	Polymer Used at Intake (ppm)	Total Pounds of Polymer Used in Plant During Month	Polymer Used in Plant (ppm)	Total Pounds of Pure Iron (Fe) Used During Month	Pure Iron (Fe) (ppm)	Turbidity of River Water (NTU)	Alkalinity of River Water (ppm as CaCO <sub>3</sub> )	Turbidity of Unit Effluent (NTU)
January	Max		85.13		0.00		5.32		5.90	70	120	5.1
	Min	2,472.79	75.96	0	0.00	105,014	4.86	116,326	5.39	26	100	1.6
	Avg		79.77		0.00		5.09		5.64	53	110	3.0
February	Max		82.63		0.00		5.33		5.90	68	115	4.1
	Min	2,245.75	76.88	0	0.00	95,180	4.91	105,493	5.44	34	92	1.3
	Avg		80.21		0.00		5.08		5.63	48	103	2.6
March	Max		82.96		0.00		5.46		5.86	109	99	6.7
	Min	2,477.28	76.38	0	0.00	105,369	4.93	116,262	5.32	44	81	1.1
	Avg		79.91		0.00		5.10		5.63	60	88	2.6
April	Max		86.71		0.00		5.60		6.21	143	112	9.3
	Min	2,358.03	68.83	0	0.00	99,603	4.53	110,343	5.02	38	92	1.1
	Avg		78.60		0.00		5.07		5.62	82	103	2.3
May	Max		82.50		0.00		5.43		6.02	148	118	4.3
	Min	2,430.42	73.08	0	0.00	100,538	2.47	113,176	4.99	37	98	1.0
	Avg		78.40		0.00		4.96		5.58	73	110	2.3
June	Max		81.25		0.00		6.34		7.04	88	134	7.0
	Min	887.51	24.88	0	0.00	33,986	4.46	37,688	4.95	22	112	1.9
	Avg		73.96		0.00		4.69		5.20	55	119	3.5
July	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
August	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
September	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
October	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
November	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
December	Max		0.00									
	Min	0.00	0.00									
	Avg		0.00									
Annual	Total	12,871.78		0		539,689		599,290				
	Max	2,477.28	86.71	0	0.00	105,369	6.34	116,326	7.04	174	147	9.3
	Min	0.00	0.00	0	0.00	33,986	2.47	37,688	4.95	12	81	1.0
	Avg	1,072.65	78.97	0	0.00	89,948	5.03	99,882	5.58	55	118	2.6

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## TABLE IV-C

### PRINCIPLE RESULTS OF OPERATION OF THE L3 CONVENTIONAL UNIT AT THE CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING: December 31, 2019

1	2	3	4	5	6	7	8	9	10	11	12	13
Month		Volume of Water Treated During Month (Millions of Gallons)	Volume of Water Treated (Millions of Gallons Per Day)	Total Pounds of Polymer Used at Intake During Month	Polymer Used at Intake (ppm)	Total Pounds of Polymer Used in Plant During Month	Polymer Used in Plant (ppm)	Total Pounds of Pure Iron (Fe) Used During Month	Pure Iron (Fe) (ppm)	Turbidity of River Water (NTU)	Alkalinity of River Water (ppm as CaCO <sub>3</sub> )	Turbidity of Unit Effluent (NTU)
January	Max	1.855.29	65.96	0	0.00	61.872	4.13	68.968	4.60	70	120	4.9
	Min		55.17		0.00		3.83		4.28	26	100	2.4
	Avg		59.85		0.00		4.00		4.46	53	110	3.2
February	Max	1.679.13	62.92	0	0.00	56.148	4.14	64,082	7.57	68	115	5.5
	Min		55.54		0.00		3.81		4.25	34	92	1.9
	Avg		59.97		0.00		4.01		4.58	48	103	3.1
March	Max	1.820.67	62.63	0	0.00	61.242	4.40	68,106	4.90	109	99	5.4
	Min		53.92		0.00		3.76		4.20	44	81	1.6
	Avg		58.73		0.00		4.03		4.49	60	88	3.1
April	Max	1.768.14	65.88	0	0.00	66.455	4.79	73,251	5.27	143	112	6.5
	Min		51.63		0.00		4.03		4.49	38	92	2.1
	Avg		58.94		0.00		4.51		4.97	82	103	3.9
May	Max	1.834.71	68.75	0	0.00	68.696	4.75	75,732	5.23	148	118	4.5
	Min		51.50		0.00		4.15		4.60	37	98	1.6
	Avg		59.18		0.00		4.49		4.95	73	110	2.4
June	Max	1.775.63	69.75	0	0.00	59,574	4.14	66,316	4.64	88	134	4.5
	Min		52.17		0.00		3.91		4.34	22	112	1.7
	Avg		59.19		0.00		4.02		4.48	55	119	2.9
July	Max	1.840.35	68.67	0	0.00	48,774	8.35	54,441	9.18	39	134	3.5
	Min		48.96		0.00		2.37		2.56	15	112	1.5
	Avg		59.37		0.00		3.15		3.51	25	126	2.2
August	Max	1.683.88	60.46	0	0.00	35.621	3.08	39,126	3.04	36	138	2.5
	Min		47.50		0.00		2.03		2.23	12	123	1.4
	Avg		54.32		0.00		2.54		2.79	25	130	1.8
September	Max	1.706.33	60.63	0	0.00	28.786	2.10	31,797	2.32	71	147	12.3
	Min		51.54		0.00		1.91		2.13	22	123	1.9
	Avg		56.88		0.00		2.02		2.23	43	130	3.0
October	Max	1.750.61	61.33	0	0.00	40.878	3.57	45,299	3.97	174	143	4.0
	Min		49.83		0.00		1.90		2.09	17	119	1.5
	Avg		56.47		0.00		2.79		3.10	79	134	2.8
November	Max	1.805.08	63.29	0	0.00	53.930	4.07	60,111	4.54	101	144	5.4
	Min		56.88		0.00		3.27		3.64	33	126	1.8
	Avg		60.17		0.00		3.58		3.99	57	134	3.3
December	Max	1.841.29	64.04	0	0.00	71.076	5.21	79,601	5.83	107	145	4.4
	Min		53.54		0.00		3.86		4.31	32	112	2.6
	Avg		59.40		0.00		4.63		5.19	63	128	3.4
Annual	Total	21,361.10		0		653,054		726,831				
	Max	1,855.29	69.75	0	0.00	71,076	8.35	79,601	9.18	174	147	12.3
	Min	1,679.13	47.50	0	0.00	28,786	1.90	31,797	2.09	12	81	1.4
	Avg	1,780.09	58.52	0	0.00	54,421	3.67	60,569	4.08	55	118	2.9

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## TABLE IV-D

**PRINCIPLE RESULTS OF OPERATION OF THE L4 CONVENTIONAL UNIT AT THE  
CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING: December 31, 2019**

1	2	3	4	5	6	7	8	9	10	11	12	13
Month		Volume of Water Treated During Month (Millions of Gallons)	Volume of Water Treated (Millions of Gallons Per Day)	Total Pounds of Polymer Used at Intake During Month	Polymer Used at Intake (ppm)	Total Pounds of Polymer Used in Plant During Month	Polymer Used in Plant (ppm)	Total Pounds of Pure Iron (Fe) Used During Month	Pure Iron (Fe) (ppm)	Turbidity of River Water (NTU)	Alkalinity of River Water (ppm as CaCO <sub>3</sub> )	Turbidity of Unit Effluent (NTU)
January	Max Min Avg	0.00										
February	Max Min Avg	0.00										
March	Max Min Avg	0.00										
April	Max Min Avg	0.00										
May	Max Min Avg	0.00										
June	Max Min Avg	0.00										
July	Max Min Avg	0.00										
August	Max Min Avg	0.00										
September	Max Min Avg	0.00										
October	Max Min Avg	0.00										
November	Max Min Avg	0.00										
December	Max Min Avg	0.00										
Annual	Total Max Min Avg	0.00 0.00 0.00 0.00										

\*L4 Basin not in service for all of 2019

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

TABLE IV-E

**MONTHLY SUMMARY OF COMBINED OPERATION OF CONVENTIONAL UNITS AT THE  
CARROLLTON WATER PURIFICATION PLANT FOR THE YEAR ENDING: December 31, 2019**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
																		Total M.G.	M.G.D.
Month		Volume of Water Treated During Month (Millions of Gallons)	Volume of Water Treated (Millions of Gallons Per Day)	Total Pounds of Polymer Used at Intake During Month	Total Pounds of Polymer Used in Plant During Month	Total Pounds of Fluoride (100%) Used During Month	Fluoride (ppm)	Total Pounds of Pure Iron (Fe) Used During Month	Total Pounds of Lime Used During Month	Lime (ppm)	Total Pounds of Chlorine Used During Month	Chlorine (ppm)	Total Pounds of Anhydrous Ammonia Used During Month	Ammonia (ppm)	Total Pounds of Polyphosphate Used During Month	Poly-phosphate (ppm)	Alkalinity of Filtered Water (ppm)	Estimated Volume of Filtered Water	
	Max.																		
	Min.																		
	Avg.																		
January	Max.		149.58				0.44			26.92		4.60		1.14		0.73	153		153
	Min.	4,328.08	135.25	0	166,885	15,384	0.39	185,294	862,399	17.66	161,498	4.27	40,050	1.02	25,132	0.65	106	4,355	134
	Avg.		139.62				0.42			23.90		4.47		1.11		0.70	129		140
February	Max.		145.54				0.44			27.09		4.55		1.21		0.72	135		147
	Min.	3,924.88	134.29	0	151,328	13,790	0.40	169,575	805,411	21.05	143,347	4.26	37,352	1.06	22,860	0.67	108	3,950	132
	Avg.		140.17				0.42			24.61		4.38		1.14		0.70	123		141
March	Max.		144.83				0.45			28.22		4.59		1.21		0.73	127		148
	Min.	4,297.95	130.96	0	166,611	14,691	0.38	184,369	884,273	14.92	157,666	4.14	42,067	1.11	25,096	0.66	102	4,242	131
	Avg.		138.64				0.42			24.69		4.40		1.17		0.70	112		137
April	Max.		149.63				0.45			28.17		5.23		1.38		0.79	142		148
	Min.	4,126.18	124.22	0	166,059	13,694	0.35	183,595	825,687	15.89	167,287	4.33	41,275	1.11	25,561	0.67	117	4,198	123
	Avg.		137.54				0.39			24.00		4.86		1.20		0.74	128		140
May	Max.		151.25				0.55			25.92		5.37		1.32		0.73	142		158
	Min.	4,265.13	128.79	0	169,233	15,035	0.35	188,908	779,948	17.79	176,172	4.65	42,219	1.13	25,105	0.68	117	4,042	97
	Avg.		137.58				0.45			21.95		4.96		1.19		0.71	128		130
June	Max.		147.75				0.56			28.37		5.52		1.32		0.73	140		133
	Min.	4,140.51	131.21	0	150,345	15,348	0.42	168,217	870,985	21.02	185,357	5.06	43,604	1.16	24,200	0.68	111	3,764	119
	Avg.		138.02				0.49			25.20		5.37		1.26		0.70	126		125
July	Max.		150.67				0.60			28.27		10.95		1.42		1.42	148		152
	Min.	4,280.22	124.96	0	124,042	18,380	0.44	139,768	725,727	14.84	198,441	5.19	45,523	1.17	26,032	0.68	129	4,182	120
	Avg.		138.07				0.53			20.20		5.56		1.28		0.73	136		135
August	Max.		140.63				0.58			28.05		13.60		1.44		0.74	149		144
	Min.	4,075.88	125.17	0	96,236	17,348	0.44	108,018	630,473	15.61	217,133	5.13	44,854	1.21	24,000	0.67	133	4,228	127
	Avg.		131.48				0.49			18.51		6.38		1.32		0.71	140		136
September	Max.		145.46				0.64			29.00		7.22		1.46		0.76	152		157
	Min.	4,092.11	130.00	0	80,080	17,077	0.44	90,069	756,350	16.13	210,148	5.80	47,572	1.29	24,171	0.69	136	4,146	129
	Avg.		136.40				0.49			22.12		6.15		1.39		0.71	143		138
October	Max.		143.67				0.52			20.32		6.16		1.48		0.76	161		148
	Min.	4,236.82	130.08	0	106,860	17,528	0.46	120,184	585,907	11.32	197,795	5.17	46,755	1.09	24,749	0.63	138	4,281	130
	Avg.		136.67				0.49			16.62		5.60		1.32		0.70	147		138
November	Max.		148.70				0.49			19.04		6.65		1.25		0.74	162		147
	Min.	4,257.61	138.08	0	127,961	16,784	0.43	144,103	515,137	9.70	175,580	4.57	42,337	1.11	24,599	0.65	142	4,264	139
	Avg.		141.92				0.47			14.52		4.95		1.19		0.69	150		142
December	Max.		158.17				0.51			20.06		5.11		1.27		0.73	162		163
	Min.	4,355.83	134.58	0	162,114	17,463	0.42	182,747	620,847	14.79	174,318	4.60	43,142	1.05	25,491	0.68	135	4,335	132
	Avg.		140.51				0.48			17.09		4.80		1.19		0.70	148		140
Annual	Total	50,381.19		0	1,667,753	192,523		1,864,845	8,863,144		2,164,742		516,749		296,997			49,986	
	Max.	4,355.83	158.17	0	169,233	18,380	0.64	188,908	884,273	29.00	217,133	13.60	47,572	1.48	26,032	1.42	162	4,355	163
	Min.	3,924.88	124.22	0	80,080	13,694	0.35	90,069	515,137	9.70	143,347	4.14	37,352	1.02	22,860	0.63	102	3,764	97
	Avg.	4,198.43	138.03	0	138,979	16,044	0.46	155,404	738,595	21.09	180,395	5.15	43,062	1.23	24,750	0.71	136	4,166	137

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## TABLE V

**PRINCIPLE RESULTS OF OPERATION OF THE ALGIERS WATER PURIFICATION PLANT FOR THE YEAR ENDING: December 31, 2019**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21			
																				Total M.G.D.	M.G.D.		
Month		Low Lift Total Million Gallons of Water Treated During Month	Amount of Water Treated Million Gallons Per 24 Hours	Total Pounds of Polyelectrolyte Used During Month	Polyelectrolyte Parts Per Million	Total Pounds of Fluoride (100%) Used During Month	Fluoride Parts Per Million	Total Pounds of Pure Iron (Fe) used During Month	Pure Iron (Fe) Parts Per Million	Total Pounds of Lime Used During Month	Lime Parts Per Million	Total Pounds of Anhydrous Ammonia Used During Month	Anhydrous Ammonia Parts Per Million	Total Pounds Chlorine Used During Month	Chlorine Parts Per Million	Total Pounds Polyphosphate Used During Month	Polyphosphate Parts Per Million	NTU Turbidity of Clarifier Effluent	PPM Clear Well Alkalinity of Filter Effluent	High Lift Pumpage			
January	Max.		12.00		4.60		0.65		7.33		49.88		0.95		5.33		0.89		5.0	101	251.17	7.69	
	Min.	287.29	9.00	11.287	4.53	1.370	0.51	14,850	5.86	98.095	19.41	2,136	0.80	12,200	4.34	1,600	0.50	0.2	64	64			7.69
	Avg.		9.27		4.56		0.56		6.23		39.80		0.86		4.94		0.65		1.4	82			
February	Max.		14.00		4.59		0.57		6.71		55.00		0.90		5.25		0.89		3.4	81	242.73	7.60	
	Min.	270.85	9.00	10.311	4.55	1.212	0.45	13,640	5.62	101.867	30.28	1,878	0.79	10,377	4.33	1,590	0.55	0.1	51	51			7.60
	Avg.		9.67		4.57		0.54		6.01		45.12		0.83		4.58		0.71		0.8	65			
March	Max.		12.00		4.81		0.58		6.88		54.96		0.93		5.82		1.09		2.4	83	263.25	6.81	
	Min.	301.90	9.00	11.517	4.53	1.336	0.49	15,290	5.48	108.090	31.67	2,250	0.84	13,031	4.97	1,950	0.62	0.1	36	36			6.81
	Avg.		9.74		4.58		0.53		6.32		42.67		0.89		5.18		0.77		0.8	55			
April	Max.		12.00		4.57		0.62		9.84		63.62		1.27		5.57		0.89		2.4	70	255.73	7.70	
	Min.	286.39	9.00	10.878	4.42	1.308	0.53	18,370	5.63	117.050	39.97	2,484	0.89	12,695	4.21	1,734	0.55	0.1	47	47			7.70
	Avg.		9.55		4.56		0.55		7.73		48.87		1.04		5.32		0.73		0.9	60			
May	Max.		12.00		4.59		0.72		8.01		62.57		1.35		5.90		0.89		6.8	72	242.86	6.78	
	Min.	306.55	9.00	11.670	4.53	1.648	0.60	17,930	5.86	159.279	39.97	3,349	1.21	14,297	5.31	1,932	0.50	0.3	53	53			6.78
	Avg.		9.89		4.57		0.65		7.04		50.83		1.27		5.59		0.76		1.7	62			
June	Max.		12.00		5.09		0.80		7.33		77.11		1.45		6.51		1.03		5.6	111	229.92	5.83	
	Min.	305.53	9.00	11.616	4.53	1.824	0.54	16,830	5.70	129.912	38.16	3,472	1.26	15,610	5.68	1,874	0.50	0.4	36	36			5.83
	Avg.		10.18		4.58		0.72		6.67		51.05		1.28		6.13		0.74		1.3	76			
July	Max.		12.67		4.58		0.78		7.69		64.99		1.43		6.45		0.90		7.2	92	296.33	8.73	
	Min.	337.47	8.67	12.776	4.50	2.036	0.64	19,085	6.03	150.191	41.01	3,815	1.31	17,308	5.95	1,916	0.50	0.5	52	52			8.73
	Avg.		10.89		4.54		0.72		6.99		53.43		1.36		6.14		0.68		1.7	71			
August	Max.		13.50		4.59		0.77		7.43		75.06		1.51		6.96		0.91		32.0	75	306.32	10.53	
	Min.	345.66	8.00	13.092	4.50	2.086	0.65	18,810	5.69	176.159	49.49	3,749	1.10	17,102	4.97	2,069	0.57	0.5	56	56			10.53
	Avg.		11.15		4.54		0.72		6.50		61.03		1.30		5.94		0.73		0.8	66			
September	Max.		13.50		4.59		0.79		7.03		75.06		1.29		5.94		1.07		30.0	97	302.14	11.22	
	Min.	336.65	8.50	12.769	4.50	1.980	0.59	18,150	5.37	186.592	48.91	3,381	1.03	15,554	5.24	2,067	0.60	1.1	58	58			11.22
	Avg.		11.22		4.55		0.71		6.48		66.40		1.20		5.54		0.75		3.4	71			
October	Max.		12.00		4.91		0.76		7.92		76.53		1.33		6.18		0.95		6.0	100	319.57	10.91	
	Min.	338.16	8.00	12,867	4.52	1,980	0.63	18,920	6.09	174.531	36.57	3,478	1.04	15,993	4.79	1,933	0.50	0.5	62	62			10.91
	Avg.		10.91		4.56		0.70		6.71		61.70		1.23		5.66		0.69		2.8	78			
November	Max.		16.00		4.58		0.69		7.03		65.02		1.13		6.17		1.07		6.8	102	319.30	9.63	
	Min.	353.77	9.38	13.414	4.50	1,736	0.45	19,360	5.62	147.157	37.95	2,958	0.90	15,558	4.51	2,067	0.50	0.3	75	75			9.63
	Avg.		11.79		4.55		0.59		6.55		50.00		1.00		5.26		0.70		1.7	89			
December	Max.		15.00		4.79		0.57		7.15		77.69		1.06		5.82		1.07		4.8	113	326.02	9.33	
	Min.	364.49	10.00	13,783	4.36	1,523	0.42	20,240	5.95	144.898	28.76	2,869	0.85	14,815	4.19	2,200	0.54	0.4	70	70			9.33
	Avg.		11.76		4.54		0.51		6.69		47.59		0.95		4.76		0.73		1.5	88			
Annual	Total	3,834.71		145,980		20,039		211,475		1,693.821		35,819		174,540		22,932					3,355.34		
	Max.	364.49	16.00	13,783	5.09	2,086	0.80	20,240	9.84	186.592	77.69	3,815	1.51	17,308	6.96	2,200	1.09	32.0	113	113	326.02	13.65	
	Min.	270.85	8.00	10.311	4.36	1,212	0.42	13,640	5.37	98.095	19.41	1,878	0.79	10,377	4.19	1,590	0.50	0.1	36	36	229.92	5.83	
	Avg.	319.56	10.51	12.165	4.56	1,670	0.63	17,623	6.61	141.152	52.96	2,985	1.12	14,545	5.46	1,911	0.72	1.8	72	72	279.61	9.19	

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

TABLE VI-A

MONTHLY SUMMARY OF CARROLLTON WATER PURIFICATION PLANT FILTER OPERATIONS FOR THE YEAR ENDING: December 2019

1	2	3		4		5		6		7		8		9		10		11	
		Total Million Gallons Water Filtered During Month		Total Number of Runs		Length of Runs in Hours		Million Gallons of Water Filtered Per Run		Million Gallons Per Day Per Filter		Total Amount in Million Gallons of Wash Water Used		Million Gallons of Wash Water Used Per Run		Percentage of Wash Water Used Per Run		Million Gallons Filtered Per Acre Per Day	
		Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New	Old	New
January	Max.					268	259	40.595	6.995							15.15	2.29		
	Min.	1.409.230	2.574.485	78	62	67	127	0.730	2.616	2.891	5.630	23.600	37.200	0.307	0.600	0.68	0.86	87.994	93.424
	Avg.					150	177	18.067	41.524							1.57	1.44		
February	Max.					361	267	39.420	70.518							12.71	2.43		
	Min.	1,398.765	2.594.431	59	68	48	137	2.360	24.292	3.143	5.753	17.700	40.200	0.300	0.591	0.76	1.19	95.675	95.465
	Avg.					181	164	23.704	39.310							1.27	1.50		
March	Max.					315	196	54.690	56.842							33.04	1.77		
	Min.	1,538.923	2,880.090	80	70	20	138	0.920	29.996	3.445	9.243	25.900	11.286	0.324	0.531	0.59	0.92	104.879	153.378
	Avg.					136	161	19.237	62.004							1.43	0.86		
April	Max.					427	422	65.830	97.166							19.48	1.93		
	Min.	1,701.226	2,590.199	77	56	48	16	0.150	0.312	3.302	5.468	22.800	33.600	0.300	0.600	0.45	0.62	102.775	90.736
	Avg.					157	203	21.661	46.254							1.37	1.30		
May	Max.					359	263	61.300	59.416							15.56	2.36		
	Min.	1,558.233	2,382.087	76	60	29	138	0.198	25.344	3.154	4.996	23.100	36.000	0.304	0.600	0.50	1.00	108.682	82.913
	Avg.					160	191	21.033	39.701							1.47	1.51		
June	Max.					287	195	46.896	42.430							16.21	2.86		
	Min.	1,775.573	2,308.391	78	78	42	93	0.340	20.425	2.185	4.612	32.500	45.600	0.427	0.585	0.86	1.38	69.379	76.532
	Avg.					240	154	23.362	29.595							1.85	1.98		
July	Max.					214	226	39.980	49.515							8.27	7.48		
	Min.	1,884.473	2,129.374	86	66	63	145	0.346	7.987	3.904	4.666	24.600	41.400	0.286	0.591	0.73	1.19	118.840	77.428
	Avg.					130	173	21.147	33.637							1.35	5.91		
August	Max.					259	195	41.880	44.332							11.65	5.40		
	Min.	1,822.172	2,285.058	74	77	120	58	0.248	12.071	3.209	5.092	25.500	52.200	0.331	0.200	0.77	1.47	97.676	84.496
	Avg.					177	153	23.665	32.467							1.43	2.00		
September	Max.					335	192	49.220	42.167							9.76	8.83		
	Min.	1,724.272	2,490.819	72	74	118	66	0.248	8.112	3.032	5.018	24.320	53.000	0.337	0.213	0.61	1.70	92.306	83.269
	Avg.					180	161	22.743	33.660							1.36	2.13		
October	Max.					215	185	37.020	42.624							11.83	5.66		
	Min.	1,702.580	2,158.288	77	76	143	91	0.348	11.300	4.419	4.634	28.206	48.600	0.352	0.225	0.95	1.50	134.512	76.897
	Avg.					131	147	24.120	28.399							1.55	2.25		
November	Max.					215	233	41.880	46.425							11.08	2.65		
	Min.	1,873.075	2,540.966	83	78	119	119	0.298	23.220	3.896	5.176	27.094	48.000	0.330	0.189	0.79	1.33	118.609	85.890
	Avg.					139	151	21.569	32.576							1.43	1.89		
December	Max.					224	184	41.880	42.167							9.37	2.68		
	Min.	1,742.556	2,502.033	83	76	143	118	0.338	21.821	3.053	5.106	26.275	44.400	0.317	0.177	0.75	1.39	92.930	84.732
	Avg.					165	155	22.184	32.921							1.49	1.77		
Annual	Total	20,131.078	29,436.221	923	841							301.595	491.486					1,224.257	1,085.160
	Max.	1,884.473	2,880.090	86	78	427	422	65.830	97.166	4.419	9.243	32.500	53.000	0.427	0.600	33.04	8.83	134.512	153.378
	Min.	1,398.765	2,129.374	59	56	20	16	0.150	0.312	2.185	4.612	17.700	11.286	0.286	0.177	0.45	0.62	69.379	76.532
	Avg.	1,677.590	2,453.018	77	70	162	166	21.874	37.671	3.303	5.450	25.133	40.957	0.326	0.425	1.46	2.05	102.021	90.430

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

## TABLE VI-B

### MONTHLY SUMMARY OF ALGIERS FILTER OPERATIONS FOR THE YEAR ENDING: December 31, 2019

1	2	3	4	5	6	7	8	9	10
Month		Total Million Gallons Water Filtered During Month of Runs	Total Number of Runs	Length of Runs in Hours	Million Gallons of Water Filtered Per Run	Million Gallons Per Day Per Filter	Total Amount in Million Gallons of Wash Water Used	Million Gallons of Wash Water Used Per Run	Percentage of Wash Water Used Per Run
January	Max.	291.77	57	191	10.549	0.74	6.25	0.110	5.50
	Min.			143	1.991				1.04
	Avg.			167	5.119				2.14
February	Max.	242.44	48	167	10.218	0.73	4.63	0.103	5.10
	Min.			167	2.020				1.01
	Avg.			167	5.050				2.04
March	Max.	246.09	48	191	10.046	0.74	4.87	0.101	5.82
	Min.			143	1.742				1.01
	Avg.			167	5.127				1.98
April	Max.	259.80	54	191	11.790	0.69	6.35	0.118	6.24
	Min.			167	1.884				1.00
	Avg.			168	4.811				2.44
May	Max.	290.05	57	167	10.291	0.77	6.12	0.107	14.62
	Min.			47	0.735				1.04
	Avg.			159	5.089				2.11
June	Max.	260.66	48	191	9.441	0.77	5.04	0.105	10.26
	Min.			167	1.023				1.11
	Avg.			169	5.430				1.93
July	Max.	331.28	57	167	9.260	0.84	7.61	0.134	7.15
	Min.			143	1.868				1.44
	Avg.			166	5.812				2.30
August	Max.	294.00	51	167	9.171	0.83	6.93	0.136	6.91
	Min.			167	1.965				1.48
	Avg.			167	5.765				2.36
September	Max.	328.42	51	167	9.056	0.88	6.61	0.130	6.90
	Min.			143	1.878				1.43
	Avg.			165	6.082				2.01
October	Max.	324.98	57	167	9.154	0.86	7.15	0.125	19.04
	Min.			23	0.659				1.37
	Avg.			159	5.701				2.20
November	Max.	308.14	48	167	9.031	0.92	5.16	0.107	5.63
	Min.			167	1.910				1.19
	Avg.			167	6.420				1.67
December	Max.	355.54	54	167	9.653	0.95	6.45	0.120	7.36
	Min.			167	1.623				1.24
	Avg.			167	6.584				1.81
Annual	Total	3533.16	630.00	5732.00	203.95	9.72	73.17	1.40	139.88
	Max.	355.54	57	191.00	11.79	0.95	7.61	0.136	19.04
	Min.	242.44	48	23.00	0.66	0.69	4.63	0.101	1.00
	Avg.	294.43	52.50	165.67	5.58	0.81	6.10	0.12	2.08

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

December 31, 2019

**TABLE VII**

**FIVE YEAR ANALYSIS COMPOSITE DATA (2015 - 2019) FOR NEW ORLEANS  
DRINKING WATER PURIFICATION SYSTEM**

PARAMETER	MISSISSIPPI RIVER (Before Purification)			FINISHED WATER (After Purification)		
	MAX	MIN	AVG	MAX	MIN	AVG
Total Alkalinity (ppm as CaCO <sub>3</sub> )	201	65	121	210	80	134
Total Hardness (ppm as CaCO <sub>3</sub> )	272	100	161	300	116	183
Noncarbonate Hardness (ppm as CaCO <sub>3</sub> )	90	12	40	104	14	48
Calcium Hardness (ppm as CaCO <sub>3</sub> )	167	40	103	200	88	126
Magnesium Hardness (ppm as CaCO <sub>3</sub> )	118	22	52	151	14	57
Nephelometric Turbidity (NTU)	345	6.2	67	0.28	0.02	0.11
pH	8.22	6.88	7.69	9.41	7.76	8.89
Chloride (ppm)	50	14	28	58	19	31
Fluoride (ppm)	0.34	0.11	0.20	0.95	0.26	0.71
Total Dissolved Solids (ppm)	330	143	254	374	192	273
Total Suspended Solids (ppm)	199	19	65	-----	-----	-----
Free Chlorine Residual (ppm as Cl <sub>2</sub> )	-----	-----	-----	0.6	0.0	0.1
Total Chlorine Residual (ppm as Cl <sub>2</sub> )	-----	-----	-----	5.0	0.5	3.3
Ammonia (ppm as N)	-----	-----	-----	0.41	0.02	0.15
Nitrate + Nitrite (ppm as N) *	-----	-----	-----	2.3	1.0	1.6
Sulfate (ppm) *	-----	-----	-----	48.0	34.6	41.3
Conductivity (µS/cm)	685	238	444	700	244	494
Temperature (°F)	88	39	66	91	52	74
Aluminum (ppm) *	-----	-----	-----	0.01	0.00	0.01
Antimony (ppm) *	-----	-----	-----	0.000	0.000	0.000
Arsenic (ppm) *	-----	-----	-----	0.001	0.000	0.000
Barium (ppm) *	-----	-----	-----	0.059	0.036	0.045
Beryllium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Cadmium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Chromium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Copper (ppm) *	-----	-----	-----	0.2	0.0	0.0
Iron (ppm) *	-----	-----	-----	0.00	0.00	0.00
Lead (ppm) *	-----	-----	-----	0.026	0.000	0.004
Manganese (ppm) *	-----	-----	-----	0.00	0.00	0.00
Mercury (ppm) *	-----	-----	-----	0.000	0.000	0.000
Nickel (ppm) *	-----	-----	-----	0.0	0.0	0.0
Selenium (ppm) *	-----	-----	-----	0.001	0.000	0.000
Silver (ppm) *	-----	-----	-----	0.00	0.00	0.00
Thallium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Zinc (ppm) *	-----	-----	-----	0.00	0.00	0.00
Potassium (ppm) *	-----	-----	-----	4.0	2.6	3.1
Sodium (ppm) *	-----	-----	-----	34.0	17.5	23.7
Cyanide (ppm) *	-----	-----	-----	0.00	0.00	0.00
Haloacetic Acids (HAA5) (ppb) *	-----	-----	-----	59.0	5.4	23.5
Total Organic Carbon (ppm) *	4.9	2.8	3.7	4.2	1.7	2.8
Total Trihalomethanes (ppb)	2.0	0.0	0.0	56.9	6.4	23.1
1,2-Dichloroethane (ppb)	0.0	0.0	0.0	0.0	0.0	0.0
Chloroform (ppb)	2.0	0.0	0.0	43.4	5.0	15.9
Carbon Tetrachloride (ppb)	0.0	0.0	0.0	4.0	0.0	0.0
Bromodichloromethane (ppb)	0.0	0.0	0.0	19.1	0.4	5.9
Tetrachloroethene (ppb)	0.0	0.0	0.0	0.0	0.0	0.0
BTX (Benzene, Toluene & Xylenes) (ppb)	7.4	0.0	0.0	1.1	0.0	0.0
Total Coliforms (CFUs/100 ml)	6800	28	610	200	0	0
E. coli (CFUs/100 ml)	-----	-----	-----	0	0	0

The results for constituents indicated with asterisks are from the Louisiana Department of Health or an LDH certified contract laboratory.

All other results are from testing by the S&WB Water Quality Laboratory.

Lead and Copper results are from 2016 and 2019 Lead and Copper Rule compliance testing.

Concerning the chemical results, the S&WB Laboratory does not meet the higher criteria required by DHH to be classified as a "DHH-OPH Certified Chemical Laboratory/Drinking Water;" therefore, any results reported by this laboratory for chemical drinking water parameters which are required to be analyzed in a certified laboratory are officially deemed invalid.

The S&WB Laboratory is certified by DHH for Total Coliform and *E. coli* testing.

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**December 31, 2019**

**TABLE VIII**

**2019 CARROLLTON OPERATION**

CHEMICAL	CHEMICAL COST	CHEMICAL COST PER MILLION GALLONS
Lime	\$813,858.20	\$16.15
Ferric Coagulant	\$1,379,985.40	\$27.39
Chlorine & Sodium Hypochlorite	\$1,500,166.21	\$29.78
Sodium Polyphosphate	\$300,515.08	\$5.96
Polyelectrolyte	\$700,551.99	\$13.91
Fluoride	\$176,127.03	\$3.50
Ammonia	\$299,714.18	\$5.95
Carbon	\$0.00	\$0.00
<b>TOTAL CHEMICALS</b>	<b>\$5,170,918.08</b>	<b>\$102.64</b>

**TOTAL COST  
PER MILLION GALLONS**

YEAR	TOTAL WATER TREATED IN MILLION GALLONS	OPERATING COST	TOTAL COST PER MILLION GALLONS
2019	50,381.19	\$10,328,116	\$205.00
2018	51,211.51	\$9,850,754	\$192.35
2017	50,714.68	\$8,208,239	\$161.85
2016	48,042.56	\$7,974,759	\$165.99
2015	47,616.37	\$8,238,282	\$173.01



# SEWERAGE AND WATER BOARD OF NEW ORLEANS

December 31, 2019

## TABLE X

### SLUDGE REMOVED FROM THE "G" BASINS PRIMARY TREATMENT UNITS DORR MONORAKE CONVENTIONAL SYSTEM 2019

Total Million Gallons Water Treated	29,020.09
Total Tons Dry Sludge Deposited in Basins Including Suspended and Dissolved Solids Removed and Reacting Chemicals	10,017
Total Million Gallons Wet Sludge Withdrawn from Basins	730.57
Average Percent solids in Wet Sludge	0.33
Total Million Gallons Water Used in Withdrawing Sludge	729.57
Percent of Total Water Treated Used in Withdrawing Wet Sludge	2.52

## TABLE X-A

### SLUDGE REMOVED FROM THE "L" BASINS PRIMARY TREATMENT UNITS DORR MONORAKE CONVENTIONAL SYSTEM 2019

Total Million Gallons Water Treated	21,361.10
Total Tons Dry Sludge Deposited in Basins Including Suspended and Dissolved Solids Removed and Reacting Chemicals	8,594
Total Million Gallons Wet Sludge Withdrawn from Basins	278.79
Average Percent solids in Wet Sludge	0.73
Total Million Gallons Water Used in Withdrawing Sludge	277.93
Percent of Total Water Treated Used in Withdrawing Wet Sludge	1.31

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

December 31, 2019

**TABLE XI**  
**2019 ANALYSIS DATA FOR NEW ORLEANS CARROLLTON**  
**DRINKING WATER PURIFICATION SYSTEM**

PARAMETER	MISSISSIPPI RIVER (Before Purification)			FINISHED WATER (After Purification)		
	MAX	MIN	AVG	MAX	MIN	AVG
Total Alkalinity (ppm as CaCO <sub>3</sub> )	147	81	118	163	100	135
Total Hardness (ppm as CaCO <sub>3</sub> )	198	100	155	220	142	182
Noncarbonate Hardness (ppm as CaCO <sub>3</sub> )	72	15	37	86	27	47
Calcium Hardness (ppm as CaCO <sub>3</sub> )	132	70	100	157	97	127
Magnesium Hardness (ppm as CaCO <sub>3</sub> )	100	25	25	86	26	56
Nephelometric Turbidity (NTU)	174	12	55	0.20	0.04	0.11
pH	8.20	6.88	7.62	9.41	8.21	8.88
Chloride (ppm)	33	16	24	39	20	28
Fluoride (ppm)	0.34	0.11	0.18	0.95	0.49	0.68
Free Chlorine Residual (ppm as Cl <sub>2</sub> )	-----	-----	-----	0.5	0.1	0.1
Total Chlorine Residual (ppm as Cl <sub>2</sub> )	-----	-----	-----	4.7	0.7	3.3
Ammonia (ppm as N)	-----	-----	-----	0.33	0.05	0.15
Nitrate + Nitrite (ppm as N) *	-----	-----	-----	1.3	1.0	1.2
Conductivity (µS/cm)	615	302	457	666	331	504
Temperature (°F)	86	44	65	85	59	73
Aluminum (ppm) *	-----	-----	-----	0.014	0.009	0.011
Antimony (ppm) *	-----	-----	-----	0.000	0.000	0.000
Arsenic (ppm) *	-----	-----	-----	0.001	0.000	0.000
Barium (ppm) *	-----	-----	-----	0.059	0.036	0.044
Beryllium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Cadmium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Chromium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Copper (ppm) *	-----	-----	-----	0.2	0.0	0.0
Iron (ppm) *	-----	-----	-----	0.00	0.00	0.00
Lead (ppm) *	-----	-----	-----	0.026	0.000	0.004
Manganese (ppm) *	-----	-----	-----	0.00	0.00	0.00
Mercury (ppm) *	-----	-----	-----	0.000	0.000	0.000
Nickel (ppm) *	-----	-----	-----	0.002	0.000	0.001
Potassium (ppm) *	-----	-----	-----	4.0	2.6	3.1
Selenium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Silver (ppm) *	-----	-----	-----	0.00	0.00	0.00
Thallium (ppm) *	-----	-----	-----	0.000	0.000	0.000
Zinc (ppm) *	-----	-----	-----	0.00	0.00	0.00
Sodium (ppm) *	-----	-----	-----	31.0	18.3	22.6
Cyanide (ppm) *	-----	-----	-----	0.00	0.00	0.00
Haloacetic Acids (HAA5) (ppb) *	-----	-----	-----	59.0	11.9	27.5
Total Organic Carbon (ppm) *	4.1	2.8	3.5	4.2	1.7	2.8
Total Trihalomethanes (ppb)	2.0	0.0	0.0	56.9	6.4	23.0
1,2-Dichloroethane (ppb)	0.0	0.0	0.0	0.0	0.0	0.0
Chloroform (ppb)	2.0	0.0	0.0	43.4	5.0	17.3
Carbon Tetrachloride (ppb)	0.0	0.0	0.0	0.0	0.0	0.0
Bromodichloromethane (ppb)	0.0	0.0	0.0	11.2	1.0	4.9
Tetrachloroethene (ppb)	0.0	0.0	0.0	0.0	0.0	0.0
BTX (Benzene, Toluene & Xylenes) (ppb)	7.4	0.0	0.0	1.1	0.0	0.0
Total Coliforms (CFUs/100 ml)	1260	86	540	9	0	0
E. coli (CFUs/100 ml)	-----	-----	-----	0	0	0

The results for constituents indicated with asterisks are from the Louisiana Department of Health or an LDH certified contract laboratory.

All other results are from testing by the S&WB Water Quality Laboratory.

Lead and Copper results are from 2019 Lead and Copper Rule compliance testing.

Concerning the chemical results, the S&WB Laboratory does not meet the higher criteria required by DHH to be classified as a "DHH-OPH *Certified* Chemical Laboratory/Drinking Water;" therefore, any results reported by this laboratory for chemical drinking water parameters which are required to be analyzed in a certified laboratory are officially deemed invalid.

The S&WB Laboratory is certified by DHH for Total Coliform and *E. coli* testing.

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

December 31, 2019

## TABLE XII

### EXTRACTS FROM TABLES IV-E AND V

**20 Year Period, 2000 to 2019 Inclusive  
Maximum, Minimum, and Average Amount of  
Water Treated Per Day  
(M.G. per 24 Hours)**

YEAR	CARROLLTON			ALGIERS		
	MAX.	MIN.	AVG.	MAX.	MIN.	AVG.
2000	152.50	126.71	128.10	18.83	7.58	12.13
2001	153.93	107.75	126.70	15.76	6.00	10.90
2002	128.67	87.00	106.63	14.00	6.66	9.80
2003	144.26	90.75	115.35	13.16	8.00	10.06
2004	145.83	102.92	122.57	13.16	8.00	10.15
2005	144.00	0.00	115.47	22.67	7.00	10.20
2006	165.63	115.33	139.73	18.34	8.00	11.67
2007	144.75	124.00	134.06	16.00	10.00	12.13
2008	143.50	114.08	133.88	13.58	6.92	10.38
2009	147.92	129.83	138.17	14.00	8.00	10.78
2010	156.50	125.33	137.10	15.67	8.00	11.25
2011	150.83	127.17	139.37	16.83	10.00	11.73
2012	163.29	117.96	137.65	15.50	10.00	11.58
2013	141.83	120.00	131.08	15.25	10.00	11.27
2014	157.30	122.08	132.57	15.58	9.00	10.43
2015	144.71	118.33	130.47	13.92	8.83	10.09
2016	213.83	120.46	131.62	17.25	8.00	9.66
2017	149.19	125.13	138.94	14.00	8.00	10.29
2018	168.70	118.21	138.62	13.53	7.41	9.37
2019	162.83	97.08	136.95	13.65	5.83	9.19

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**December 31, 2019**

**TABLE XIII**

**Monthly Temperature (Degrees Farenheit) of the  
Mississippi River Water at the Carrollton Plant**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
January	41	43	48	47	42	43	47	47	41	46
February	41	43	48	47	40	45	46	49	45	45
March	48	51	57	49	46	45	54	55	55	50
April	62	61	69	57	59	61	62	63	58	59
May	71	68	74	66	69	70	70	69	71	69
June	81	80	81	76	79	79	79	77	82	78
July	85	84	85	81	83	84	86	83	86	82
August	86	87	87	83	84	85	85	85	86	85
September	83	80	82	83	83	83	84	80	83	84
October	72	72	72	76	72	74	75	77	73	75
November	61	62	60	62	59	65	66	61	56	54
December	50	50	55	48	49	54	53	52	47	48
Maximum	89	90	89	86	86	87	87	87	88	86
Minimum	37	40	46	45	37	39	42	44	40	44
Average	65	65	68	65	64	66	67	67	65	65

<u>Ten Year Period</u>	
Maximum:	90
Minimum:	37
Average:	66

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**

**December 31, 2019**

**TABLE XIV  
Monthly Temperature (Degrees Farenheit) of the  
Tap Water at the Carrollton Plant**

	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>
January	62	57	64	59	65
February	62	59	64	62	68
March	66	66	67	69	69
April	73	72	72	71	72
May	76	77	76	78	75
June	80	83	80	83	76
July	83	88	82	86	80
August	82	87	84	85	82
September	80	86	83	83	80
October	76	81	81	79	77
November	70	74	72	69	69
December	64	66	65	65	66
Maxiumum	86	91	88	89	85
Minimum	55	52	59	53	59
Average	73	75	74	74	73

<u>Five Year Period</u>	
Maximum:	91
Minimum:	44
Average:	74

# SEWER AND WATER BOARD OF NEW ORLEANS

December 31, 2019

New Orleans East Bank Sewerage Treatment Plant  
2019 Yearly Summary

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019
<b>Plant EF Flow (MGD)</b>													
Average	100.919	112.3	94.3	109.483	109.839	85.99	115.584	99.345	70.957	96.652	107.6	88.187	99
Maximum	187.3	174.9	154.1	203.2	181.4	140.1	179.5	173.4	23.6	166.4	183.4	159	203
<b>INFLUENT BOD (mg/L)</b>													
Average	106.2	138	111.5	103.3	81.9	74.4	55.1	66.6	87.4	74.9	84.8	88.6	89
Maximum	175	200	186	148	183	129	98	121	160	105	105	134	200
<b>INFLUENT TSS (mg/L)</b>													
Average	161.4	225	154.1	169.3	130.5	112.6	97.8	103.8	96.4	101.2	94.5	99.4	129
Maximum	382	384	292	406	272	234	193	174	155	129	131	163	406
<b>INFLUENT BOD (lbs/day)</b>													
Average	89,942	121,511	89,900	89,710	68,546	48,478	48,335	57,197	61,949	56,932	63,043	63,154	71,558
Maximum	204,622	196,032	176,955	221,224	135,681	91,093	101,786	92,336	105,684	82,952	81,875	95,806	221,224
<b>INFLUENT TSS (lbs/day)</b>													
Average	170,242	202,380	178,529	175,929	126,315	75,359	88,167	90,957	137,153	90,198	101,455	110,248	128,911
Maximum	380,012	411,849	318,281	632,512	204,378	170,382	222,078	150,812	854,969	183,040	262,165	209,249	854,969
<b>EFFLUENT BOD (mg/L)</b>													
Average	21.9	23.2	20.5	22	18.7	20.7	22.3	19.9	19.3	20.4	26.1	23	21.5
Weekly Maximum	31	32	36	31	38	36	39	24	32	26	35	40	40.0
<b>EFFLUENT TSS (mg/L)</b>													
Average	18.6	18.4	15.8	14.9	12.2	15	23.7	22.6	17	16.1	17.5	15.6	17.3
Weekly Maximum	46	40	29	39	23	28	51	31	23	28	25	23	51.0
<b>EFFLUENT BOD (lbs/day)</b>													
Average	18,555	21,752	16,042	19,972	16,226	14,699	21,288	16,221	11,219	16,430	23,146	16,815	17,697
Weekly Maximum	39,052	39,098	28,600	48,539	3,112	26,281	40,487	26,031	18,760	29,724	34,202	27,847	48,539
<b>EFFLUENT TSS (lbs/day)</b>													
Average	16,184	17,884	12,687	14,838	11,127	10,770	24,030	18,769	9,979	13,504	15,474	11,510	14,730
Weekly Maximum	57,776	51,053	26,464	63,100	28,602	22,200	58,995	34,882	18,760	35,930	26,002	25,521	63,100
<b>EFFLUENT CL2 (mg/L)</b>													
Average	0.5	0.5	0.5	0.49	0.49	0.46	0.43	0.44	0.32	0.33	0.32	0.36	0.43
Maximum	0.5	0.5	0.5	0.5	0.5	0.5	0.54	0.5	0.59	0.53	0.47	0.5	0.59
<b>EFFLUENT COLIFORM (col/100-ml)</b>													
Average (Geo)	2.49	2.24	2.17	2.40	3.29	3.97	4.84	17.06	12.36	7.54	4.94	3.35	5.55
Weekly Maximum (Geo)	4.18	2.53	2.56	2.73	5.95	7.51	14.49	38.33	39.46	14.79	6.38	6.44	39.46
<b>EFFLUENT pH (su)</b>													
Minimum	6.8	6.75	6.82	6.85	6.75	6.74	6.75	6.80	6.95	6.93	6.98	6.98	6.74
Maximum	6.96	6.97	6.92	6.91	6.89	6.84	7.04	7.06	7.08	7.19	7.11	7.08	7.19
<b>DISPOSED SLUDGE (dry tons)</b>													
Average per day	24.04	24.71	27.95	28.30	26.91	26.19	26.00	25.50	25.18	23	23	22	25.25
Total	745.37	642.38	866.45	848.87	834.31	785.64	701.93	688.51	755.30	658.60	702.21	686.54	8,916
<b>ELECTRICITY (kwhr)</b>													
Average per day	69,495	75,807	70,175	73,547	74,335	66,267	60,606	73,794	66,547	70,723	60,107	66,173	68,965
Total (kwhr)	2,223,832	2,046,800	2,245,600	2,206,400	2,304,400	1,988,000	1,878,800	2,287,600	1,996,400	2,192,400	1,803,200	1,985,203	25,158,635
<b>RAINFALL (inches) East Bank</b>													
TOTAL	3.58	6.17	2.69	8.58	6.66	2.7	10.42	4.49	1.45	3.26	0.29	1.19	51.48

Precipitation (inch)  
Southern Regional Climate Center-Monthly

# SEWERAGE AND WATER BOARD OF NEW ORLEANS

December 31, 2019

## New Orleans West Bank Sewerage Treatment Plant 2019 Yearly Summary

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019
<b>Plant Ef Flow (MGD)</b>													
Average	10.7	10.126	8.426	10.637	12.98	9.836	14.913	15.953	9.619	10.61	10.018	9.71	11.13
Maximum	22.9	18.820	15.900	23.49	34.63	19.4	30.2	27.760	25.20	28.19	26.00	19.62	34.63
<b>Plant INF Flow (MGD)</b>													
Average	11.77	13.080	10.333	12.079	12.955	8.992	13.75	15.420	7.891	12.754	11.245	13.23	11.96
Maximum	23.2	25.220	16.900	30.31	36.08	14.4	27.4	28.460	10.16	25.7	15.00	25.40	36.08
<b>INFLUENT BOD (mg/L)</b>													
Average	85.8	101.9	95.5	105.9	86.9	108	92.7	76.2	87.8	75.1	79.9	81.9	89.80
Maximum	179	190	151	265	169	205	169	119	153	106	114	113	265
<b>INFLUENT TSS (mg/L)</b>													
Average	132.9	148.5	127.5	128.4	101.5	122.9	101.5	86	94.6	89.1	76.6	83.3	107.73
Maximum	292	318	182	472	165	200	189	146	151	126	97	141	472
<b>INFLUENT BOD (lbs/day)</b>													
Average	8,635	11,709	7,916	10,407	9,035	8,087	10,489	10,243	5,834	7,765	7,273	8,597	8,832
Maximum	34,634	27,097	13,366	41,863	24,674	14,417	26,301	18,020	10,846	19,642	10,183	23,278	41,863
<b>INFLUENT TSS (lbs/day)</b>													
Average	13,170	17,120	10,659	12,848	10,614	9,208	12,260	11,499	6,251	9,355	6,995	8,628	10,717
Maximum	56,499	45,351	16,443	49,950	28,586	20,011	34,047	17,219	11,609	25,437	9,373	29,046	56,499
<b>EFFLUENT BOD (mg/L)</b>													
Average	10.2	14.2	16.9	13.7	8.1	6.2	6.6	7.8	5.3	6.6	8.3	10.2	9.51
Weekly Maximum	16	19	24	32	15	8	11	13	7	8	14	13	32
<b>EFFLUENT TSS (mg/L)</b>													
Average	17	20.2	17.3	17.5	15.5	11.2	11.9	11.8	7.2	8.8	9.9	11.8	13.34
Weekly Maximum	32	30	22	35	39	20	23	22	10	13	15	16	39
<b>EFFLUENT BOD (lbs/day)</b>													
Average	899	1,256	1,158	1,237	904	520	854	1,091	595	568	637	805	877.01
Weekly Maximum	3,056	2,825	2,122	5,935	3,466	1,133	2,294	2,084	1,471	1,735	1,039	1,241	5,935
<b>EFFLUENT TSS (lbs/day)</b>													
Average	1,562	1,847	1,231	1,572	1,906	957	1,684	1,778	426	793	767	937	1,288.43
Weekly Maximum	5,730	4,552	2,652	6,492	11,264	2,589	5,275	5,093	1,051	2,819	1,126	1,481	11,264
<b>EFFLUENT CL2 (mg/L)</b>													
Average	1.24	1.23	1.23	1.14	1.15	1.21	1.01	1.08	1.12	0.84	0.82	0.79	1.07
Maximum	1.4	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.45	1.29	1.2	1.6	1.60
<b>EFFLUENT COLIFORM (col/100-ml)</b>													
Average (Geo)	2.9	2.38	2.56	3.26	3.11	2.43	8.5	4.55	2.38	2.38	3.14	2.72	3.36
Weekly Maximum (Geo)	5.18	3.87	3.74	8.45	4.86	2.83	17.6	12.56	5.04	3.03	8.09	3.06	17.60
<b>EFFLUENT pH (su)</b>													
Minimum	7.69	7.47	7.33	7.25	7.18	7.04	7.49	7.89	7.76	7.53	7.78	7.65	7.04
Maximum	7.95	7.68	7.91	7.46	7.52	7.21	8.16	8.4	8.72	8.19	8.06	7.99	8.72
<b>DISPOSED SLUDGE (dry tons)</b>													
Average per day	7.12	2.51	6.39	4.28	2.46	5.55	6.44	6.27	6.91	5.37	4.15	3.43	5
Total	163.81	57.68	166.14	72.69	61.61	149.79	122.32	125.41	117.47	112.74	74.64	85.65	1,310
<b>ELECTRICITY (kwhr)</b>													
Average per day	10,339	9,807	8,873	9,641	9,619	11,103	11,116	10,062	16,524	16,622	10,426	10,485	11,218
Total (kwhr)	289,500	294,197	266,185	327,793	288,565	299,770	344,606	311,922	495,710	515,293	312,771	325,038	4,071,350
<b>RAINFALL (inches) West Bank</b>													
TOTAL	3.08	3.97	1.14	6.84	7.39	3.84	9.30	6.00	0.35	7.30	1.30	1.79	52.30



SEWERAGE AND WATER BOARD OF NEW ORLEANS  
ANNUAL REPORT 2019 - FOR THE CALENDAR YEAR ENDING DECEMBER 31, 2019  
SEWER TABULATION NUMBER 2

LENGTH OF SEWER LINES OF EACH SIZE AND MATERIAL DISCARDED, BUILT, AND NOW REMAINING IN THE SYSTEM

SIZE & MATERIAL OF SEWER	TOTAL LENGTH IN SYSTEM AS OF 12/31/2018	DESTROYED OR ABANDONED IN 2019	BUILT IN 2019	NOW REMAINING IN THE SYSTEM AS OF 12/31/2019
72" Steel	29,182.4			
68" Steel	9,061.9			
66" Steel	28,979.7			
66" Concrete	13,740.7			
60" Steel	2,577.7			
60" Concrete	722.8			
57" Concrete	1,766.8			
54" Steel	44,014.5			
54" Concrete	7,030.4			
51" Concrete	755.9			
50" Steel	135.0			
48" Steel	21,147.2			
48" Concrete	10,127.6			
48" Fiberglass Reinforced	10,900.2			
48" P.V.C.	3,663.4			
45" Concrete	3,048.4			
42" Steel	3,580.2			
42" Concrete	19,121.2			
39" Brick	832.8			
39" Concrete	3,871.8			
36" Vitrified Clay	1,894.9			
36" Cast Iron	431.0			
36" Steel	332.6			
36" Prestressed Concrete	11,273.0			
36" Reinforced Concrete	9,312.7			
36" P.V.C.	10,604.0			
33" Brick	3,080.9			
33" Vitrified Clay	562.3			
33" Reinforced Concrete	1,381.4			
30" Brick	2,763.0			
30" Vitrified Clay	7,538.5			
30" Cast Iron	4,305.9			
30" Steel	3,535.2			
30" Prestressed Concrete	484.0			
30" Reinforced Concrete	33,920.5			
30" Fiberglass Reinforced	16,400.0			
30" P.V.C.	996.0			
27" Vitrified Clay	24,428.4	292.3	0.0	24,136.1
27" Reinforced Concrete	13,336.4			
27" P.V.C.	4,634.0		292.3	4,926.3
24" Vitrified Clay	31,572.2			
24" Cast Iron	16,269.2			
24" Ductile Iron	619.0			

SIZE & MATERIAL OF SEWER	TOTAL LENGTH IN SYSTEM AS OF 12/31/2018	DESTROYED OR ABANDONED IN 2019	BUILT IN 2019	NOW REMAINING IN THE SYSTEM AS OF 12/31/2019
24" Steel	87.0			
24" Reinforced Concrete	26,537.0			
24" Asbestos Cement	4,924.2			
24" P.V.C.	5,949.6			
21" Reinforced Concrete	10,609.1	29.0	0.0	10,580.1
21" P.V.C.	5,844.4		29.0	5,873.4
20" Ductile Iron Pipe	1,991.4			
18" P.V.C.	34,676.5	0.0	2,456.0	37,132.5
16" Steel	120.0			
16" Cast Iron				
16" Asbestos Cement	28,460.9			
16" Plastic	1,913.1			
16" P.V.C. C-900				
15" Vitrified Clay	96,418.8	1,866.0	0.0	94,552.8
15" P.V.C.	16,781.7	0.0	3,041.0	19,822.7
15" Plastic Truss	1,331.6			
12" Vitrified Clay	107,688.6	4,285.5	0.0	103,403.1
12" P.V.C.	78,973.5	0.0	4,537.7	83,511.2
10" Vitrified Clay	147,715.6	2,006.5	0.0	145,709.1
10" Steel	130.0			
10" Concrete	45,348.4	1,116.5	0.0	44,231.9
10" Asbestos Cement	4,356.2			
10" P.V.C.	142,331.5	0.0	3,123.0	145,454.5
10" Plastic Truss	4,677.5			
8" Terra Cotta	308,618.4	1,439.0	0.0	307,179.4
8" Vitrified Clay	3,912,629.0	53,085.0	0.0	3,859,544.0
8" Cast Iron	32,036.2			
8" Ductile Iron	2,233.0			
8" Concrete	265,663.9	2,468.0	0.0	263,195.9
8" Asbestos Cement	2,777.9	435.0	0.0	2,342.9
8" P.V.C.	1,058,074.3	37.0	56,443.2	1,114,480.5
8" Plastic Truss	61,911.8	642.0	0.0	61,269.8
8" Plastic	689,939.1	1,176.0	0.0	688,763.1
6" Terra Cotta	8,730.9			
6" Vitrified Clay	75,347.4			
6" Cast Iron	4,204.4			
6" Asbestos Cement	4,493.9			
6" P.V.C.	479,207.3	0.0	15,634.0	494,841.3
6" Plastic Truss	1,763.3			
6" Plastic	364,867.8			
4" Cast Iron	874.2			
4" Ductile Iron	180.4			
4" P.V.C.	5,525.7			
4" Plastic	126.0			
<b>Total Linear Feet</b>	<b>8,460,007.2</b>	<b>68,877.8</b>	<b>85,556.2</b>	<b>8,476,685.6</b>
<b>Total Miles</b>	<b>1,602.274</b>	<b>13.050</b>	<b>16.204</b>	<b>1,605.433</b>

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**ANNUAL REPORT 2019 - FOR THE CALENDAR YEAR ENDING DECEMBER 31, 2019**  
**WATER TABULATION NUMBER 1**  
**WATER LINES, MANHOLES, VALVES, AND FIRE HYDRANTS IN THE SYSTEM AS OF DECEMBER 31, 2019**

**WATER LINES DISCARDED AND INSTALLED IN 2019**

ORIGINAL CONSTRUCTION (FEET)	DESTROYED OR ABANDONED IN 2019 (FEET)	BUILT IN 2019 (FEET)	REMAINING IN THE SYSTEM AS OF 12/31/2019 (FEET)	REMAINING IN THE SYSTEM AS OF 12/31/2019 (MILES)
9,683,294.6	102,535.7	109,295.5	9,690,054.4	1,835.238

**WATER MANHOLES REMOVED AND INSTALLED IN 2019**

ORIGINAL CONSTRUCTION	REMOVED IN 2019	BUILT IN 2019	REMAINING IN THE SYSTEM AS OF 12/31/2019
30,650	67	279	30,862

**WATER VALVES REMOVED AND INSTALLED IN 2019**

ORIGINAL CONSTRUCTION	REMOVED IN 2019	INSTALLED IN 2019	REMAINING IN THE SYSTEM AS OF 12/31/2019
29,990	142	468	30,316

**FIRE HYDRANTS REMOVED AND INSTALLED IN 2019**

ORIGINAL CONSTRUCTION	REMOVED IN 2019	INSTALLED IN 2019	REMAINING IN THE SYSTEM AS OF 12/31/2019
23,264	270	270	23,264

**DETAILS OF WATER LINES, MANHOLES, VALVES, AND FIRE HYDRANTS INSTALLED (CONSTRUCTED) IN 2019**

ITEMS	BOARD FUNDED	BY OTHERS	TOTAL FEET	TOTAL MILES
2" P.V.C	2,024.8	6.0	2,030.8	0.385
4" P.V.C	733.7	125.0	858.7	0.163
6" P.V.C	3,251.5	448.0	3,699.5	0.700
8" P.V.C	75,213.4	2,072.6	77,286.0	14.638
12" P.V.C	9,616.2	238.4	9,854.6	1.866
16" P.V.C	617.0	0.0	617.0	0.117
20" P.V.C	1,960.0	0.0	1,960.0	0.371
36" P.V.C	660.5	0.0	660.5	0.125
12" PLASTIC	12.0	0.0	12.0	0.002
4" DUCTILE IRON	480.8	0.0	480.8	0.091
6" DUCTILE IRON	352.9	247.8	600.7	0.114
8" DUCTILE IRON	5,934.3	83.0	6,017.3	1.140
12" DUCTILE IRON	4,949.0	0.0	4,949.0	0.937
16" DUCTILE IRON	142.0	0.0	142.0	0.027
20" DUCTILE IRON	30.0	0.0	30.0	0.006
36" DUCTILE IRON	14.0	0.0	14.0	0.003
48" DUCTILE IRON	12.0	0.0	12.0	0.002
16" STEEL	70.0	0.0	70.0	0.013
<b>TOTAL WATER LINES CONSTRUCTED IN 2019</b>	<b>106,074.1</b>	<b>3,220.8</b>	<b>109,294.9</b>	<b>20.700</b>
<b>WATER MANHOLES CONSTRUCTED IN 2019</b>	<b>BOARD FUNDED</b>	<b>BY OTHERS</b>	<b>TOTAL MANHOLES BUILT IN 2019</b>	
	245	34	279	
<b>WATER VALVES INSTALLED IN 2019</b>	<b>BOARD FUNDED</b>	<b>BY OTHERS</b>	<b>TOTAL WATER VALVES INSTALLED IN 2019</b>	
	447	21	268	
<b>FIRE HYDRANTS INSTALLED IN 2019</b>	<b>BOARD FUNDED</b>	<b>BY OTHERS</b>	<b>TOTAL FIRE HYDRANTS INSTALLED IN 2019</b>	
	266	4	270	

**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**ANNUAL REPORT 2019 - FOR THE CALENDAR YEAR ENDING DECEMBER 31, 2019**  
**WATER TABULATION NUMBER 2**

**LENGTH OF WATER LINES OF EACH SIZE AND MATERIAL, NUMBER OF VALVES OF EACH SIZE, BOTH GATE AND CHECK, ORIGINALLY INSTALLED, THE QUANTITIES DISCARDED OR BUILT, AND THE QUANTITIES NOW REMAINING IN THE DISTRIBUTION SYSTEM**

WATER LINES					
SIZE	MATERIAL	TOTAL LENGTH IN SYSTEM AS OF 12/31/2018	DESTROYED OR ABANDONED IN 2019	BUILT IN 2019	NOW REMAINING IN THE SYSTEM AS OF 12/31/2019
54"	Concrete Pipe	7,535.1			
50"	Steel Pipe	88,374.0			
48"	Cast Iron Pipe	12,759.3	12.0		12,747.3
48"	Steel Pipe	36,637.1			
48"	Concrete Pipe	4,982.9			
48"	Ductile Iron Pipe		12.0	12.0	0.0
43"	Cast Iron Pipe	11,170.1			
42"	Cast Iron Pipe	4,349.6			
42"	Concrete Pipe	9,361.9			
36"	Cast Iron Pipe	4,523.3	14.0		4,509.3
36"	Steel Pipe	16,922.0			
36"	Concrete Pipe	37,374.7			
36"	Ductile Iron Pipe		14.0	14.0	0.0
36"	P.V.C. Pipe			660.5	660.5
36"	Prestressed Concrete	675.0			
30"	Cast Iron Pipe	59,740.1			
30"	Ductile Iron Pipe	296.0			
30"	Steel Pipe	19,863.1			
30"	Concrete Pipe	71,216.4			
30"	Prestressed Concrete	36,654.4			
30"	Reinforced Concrete	3,919.6			
30"	P.V.C. Pipe	3,716.1			
24"	Cast Iron Pipe	30,090.0			
24"	P.V.C. Pipe	1,372.0			
24"	Ductile Iron Pipe	140.0			
24"	Concrete Pipe	4,062.5			
20"	P.V.C. Pipe	12,320.5		1,960.0	14,280.5
20"	Cast Iron Pipe	85,767.9			
20"	Ductile Iron Pipe	10,441.4		30.0	10,471.4
20"	Concrete Pipe	18,755.8			
20"	Prestressed Concrete	212.5			
20"	Asbestos Cement	12,688.0			
18"	Reinforced Concrete	970.5			
16"	Steel Pipe			70.6	70.6
16"	Cast Iron Pipe	112,441.7	90.0		112,351.7
16"	Ductile Iron Pipe	6,702.7		142.0	6,844.7
16"	Concrete Pipe	5,681.6			
16"	Asbestos Cement	63,245.6			
16"	P.V.C. Pipe	14,649.0		617.0	15,266.0
15"	Reinforced Concrete	1,069.3			
12"	Plastic Pipe			12.0	12.0
12"	Cast Iron Pipe	836,515.7	16,377.0		820,138.7
12"	Ductile Iron Pipe	22,587.1	740.0	4,949.0	26,796.1
12"	Steel Pipe	1,272.9			
12"	Asbestos Cement	357,603.6	2,460.6		355,143.0
12"	P.V.C. Pipe	259,531.7		9,854.6	269,386.3
10"	Cast Iron Pipe	10,271.7	192.0		10,079.7
10"	Ductile Iron Pipe	670.0			
10"	Asbestos Cement	12,763.6			
10"	P.V.C. Pipe	7,896.0			
8"	Cast Iron Pipe	108,455.2	8,364.0		100,091.2
8"	Ductile Iron Pipe	46,790.3	23.0	6,017.3	52,784.6
8"	Asbestos Cement	693,077.5	572.0		692,505.5
8"	P.V.C. Pipe	928,031.6	2,143.0	77,286.0	1,003,174.6
8"	Plastic Pipe	318,036.5			
6"	Cast Iron Pipe	2,430,930.7	51,741.0		2,379,189.7
6"	Ductile Iron Pipe	25,961.6	1,492.0	600.7	25,070.3
6"	Asbestos Cement	1,034,080.7	13,304.0		1,020,776.7
6"	P.V.C. Pipe	316,051.5	358.4	3,699.5	319,392.6
6"	Plastic Pipe	121,385.5	48.7		121,336.8
4"	Cast Iron Pipe	1,166,342.5	4,322.0		1,162,020.5
4"	Ductile Iron Pipe	6,638.1		480.8	7,118.9
4"	Asbestos Cement	22,250.8			
4"	P.V.C. Pipe	28,282.4	256.0	858.7	28,885.1
4"	Plastic Pipe	3,833.1			
3"	Galvanized Steel	3,361.7			
2"	Cast Iron Pipe	7,909.9			
2"	Galvanized Steel	9,620.0			
2"	P.V.C. Pipe	87,114.4		2,030.8	89,145.2
1"	Galvanized Steel	5,346.6			
<b>Total Linear Feet</b>		<b>9,683,294.6</b>	<b>102,535.7</b>	<b>109,295.5</b>	<b>9,690,054.4</b>
<b>Total Miles</b>		<b>1,833.957</b>	<b>19.420</b>	<b>20.700</b>	<b>1,835.238</b>

VALVES				
SIZE	EXISTING IN SYSTEM AS OF 12/31/2018	REMOVED IN 2019	INSTALLED IN 2019	REMAINING IN SYSTEM AS OF 12/31/2019
48"	16			
42"	4			
36"	18			
30"	66			
24"	39			
20"	133		3	136
16"	193	2	1	192
14"	3			
12"	2,326	20	51	2,357
10"	72			
8"	6,866	54	204	7,016
6"	13,097	63	154	13,188
4"	7,263	2	85	7,346
<b>Total</b>	<b>30,096</b>	<b>141</b>	<b>498</b>	<b>30,453</b>



**SEWERAGE AND WATER BOARD OF NEW ORLEANS**  
**December 31, 2019**  
**COST OF OPERATIONS IDENTIFICATION PROGRAM**  
**BENCHMARKING 2019**

**ADMINISTRATIVE OFFICER:**

**HUMAN RESOURCES:**

Cost to Hire an Employee	\$	287.66
Employee Turnover Rate		18.79%

**RISK MANAGEMENT:**

**Insurance Cost per Employee:**

Workers' Compensation	\$	3,469,856
Auto Liability	\$	110,297
General Liability	\$	2,730,371

**GENERAL SUPERINTENDENT:**

**ENGINEERING:**

Total Capital Program Design and Construction Contracts Cost Growth		10.0%
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**ENVIRONMENTAL:**

Cost of Typical Industry Sampling Event	\$	1,893.78
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**FACILITIES MAINTENANCE:**

Cost to set 5/8" water meter	\$	124.50
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**SUPPORT SERVICES:**

Average Annual Maintenance Cost	\$	1,294.21
Per Piece of Equipment		20-25%

**CHIEF CUSTOMER SERVICE OFFICER:**

**CUSTOMER REVENUE MANAGEMENT/CUSTOMER  
METER ASSURANCE/CUSTOMER EXPERIENCE:**

Cost to Read a Meter	\$	2.37
Cost to Render a Bill (Less Meter Reading)	\$	0.86
Cost to Manage a Customer by Phone	\$	3.11
Cost to Manage a Customer by Mail	\$	11.97
Cost to Manage a Walk-in Customer	\$	2.90
Cost to Process a Mail-in Payment	\$	1.09
Cost to Process a Walk-in Payment	\$	2.69

**CHIEF FINANCIAL OFFICER:**

**OFFICE OF CONTROLLER:**

Cost to Process a Miscellaneous Invoice	\$	44.37
Cost to Process a Vendor Invoice	\$	13.56
Cost to Process a Paycheck	\$	3.39

**OFFICE OF PROCUREMENT:**

Cost to Process a Sundry Purchase Order	\$	58.56
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# THANK YOU!



**We thank you for your time and interest in our 2019 CAFR. We thank our customers. We thank our men and women who serve to fulfill our mission of providing safe drinking water to everyone in New Orleans; removing waste water for safe return to the environment; draining away storm water; providing water for fire protection; providing information about products and services; and doing all of this continuously at a reasonable cost to the community.**