OFFICIAL STATEMENT
Dated July 21, 2020

Ratings: Fitch: "AA"
Moody's: "Aa2"
S&P: "AA"
(See "RATINGS" herein.)

NEW ISSUE – Book-Entry-Only

In the opinion of Co-Bond Counsel (named below), assuming continuing compliance by the City (defined below) after the date of initial delivery of the Bonds (defined below) with certain covenants contained in the Ordinance (defined below) pertaining to the Bonds and subject to the matters set forth under "TAX MATTERS" herein, interest on the Bonds for federal income tax purposes under existing statutes, regulations, published rulings, and court decisions (1) will be excludable from the gross income of the owners thereof pursuant to section 103 of the Internal Revenue Code of 1986, as amended to the date of initial delivery of the Bonds, and (2) will not be included in computing the alternative minimum taxable income of the owners thereof. (See "TAX MATTERS" herein.)

$153,390,000
CITY OF SAN ANTONIO, TEXAS
(A political subdivision of the State of Texas located primarily in Bexar County)
WATER SYSTEM JUNIOR LIEN REVENUE BONDS, SERIES 2020C (NO RESERVE FUND)

Dated Date: July 1, 2020 **Due: May 15, as shown on inside cover**
Interest to Accrue from Date of Delivery

GENERAL . . . The City of San Antonio, Texas (the "City"), acting on behalf and for the benefit of the San Antonio Water System ("SAWS"), is issuing its $153,390,000 Water System Junior Lien Revenue Bonds, Series 2020C (No Reserve Fund) (the "Bonds") pursuant to the Constitution and the general laws of the State of Texas, including particularly Chapters 1371 and 1502, Texas Government Code, as amended, the City's Home Rule Charter, and an ordinance (the "Ordinance") relating to the Bonds adopted by the City Council of the City (the "City Council") on June 25, 2020. As permitted by Chapter 1371, Texas Government Code, as amended, the City Council has, in the Ordinance, delegated to certain authorized officials of the City and SAWS (each, an "Authorized Official") the authority to establish final terms of sale of the Bonds. These final sales terms are evidenced in an "Approval Certificate" executed by an Authorized Official on July 21, 2020.

PURPOSE . . . Proceeds from the sale of the Bonds will be used to provide funds for the purposes of (i) building, improving, extending, enlarging, equipping, and repairing the System (defined below), and (ii) paying the costs of issuance of the Bonds.

PAYMENT TERMS . . . Interest on the Bonds will accrue from their date of initial delivery to the initial purchasers thereof identified below (the "Underwriters"), will be payable on May 15 and November 15 of each year, commencing May 15, 2021, and will be calculated on the basis of a 360-day year consisting of twelve 30-day months. The definitive Bonds will be initially registered and delivered only to Cede & Co., the nominee of The Depository Trust Company, New York, New York ("DTC"), acting as a securities depository (the "Securities Depository"), pursuant to the Book-Entry-Only System described herein. The City reserves the right to discontinue the use of the Securities Depository. Beneficial ownership of the Bonds may be acquired in denominations of $5,000 or integral multiples thereof. No physical delivery of the Bonds will be made to the owners thereof. Principal of, premium, if any, and interest on the Bonds will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Bonds (see "THE BONDS – Book-Entry-Only System" herein). The initial Paying Agent/Registrar is UMB Bank, N.A., Dallas, Texas (see "THE BONDS – Paying Agent/Registrar" herein).

SECURITY . . . The Bonds are special obligations of the City, payable, both as to principal and interest, solely from and secured by, together with the other currently outstanding Junior Lien Obligations (as described herein), a junior lien on and pledge of the Net Revenues (as defined herein) of the City's combined water and wastewater system (the "System"), management, operation, and maintenance of which is the responsibility of the SAWS Board of Trustees (the "Board"), remaining after the City's satisfaction of its debt service payment and reserve fund obligations, among other matters, relating to the Senior Lien Obligations (as described herein). **The Reserve Fund (defined herein) providing additional security for certain of the outstanding Junior Lien Obligations does not additionally secure the Bonds.** The City has not covenanted or obligated itself to pay the Bonds from money raised or to be raised from taxation (see "THE BONDS – Security and Source of Payment; Pledge of Net Revenues" herein).

CUSIP PREFIX: 79642G
MATURITY SCHEDULE & 9 DIGIT CUSIP
SEE SCHEDULE ON INSIDE COVER

LEGALITY . . . The Bonds are offered for delivery when, as and if issued and received by the Underwriters named below, and subject to the approving opinion of the Attorney General of Texas and the approval of certain legal matters by Norton Rose Fulbright US LLP, San Antonio, Texas, and Escamilla & Poneck, LLP, San Antonio, Texas, Co-Bond Counsel (see "APPENDIX E - FORM OF CO-BOND COUNSEL'S OPINION" herein). Certain legal matters will be passed upon for the City by the City Attorney, for the Board by its counsel, Langley & Banack, Incorporated, San Antonio, Texas, and for the Underwriters by their counsel, Bracewell LLP, Austin, Texas.

DELIVERY . . . It is expected that the Bonds will be available for initial delivery through the services of DTC on or about August 11, 2020 (the "Date of Delivery").

WELLS FARGO SECURITIES

FHN FINANCIAL CAPITAL MARKETS **LOOP CAPITAL MARKETS**

M. E. ALLISON & CO., INC.

MATURITY SCHEDULE **CUSIP NO.[1] PREFIX: 79642G**

$153,390,000
City of San Antonio, Texas
Water System Junior Lien Revenue Bonds, Series 2020C (No Reserve Fund)

$83,715,000 Serial Bonds

Principal Amount ($)	Stated Maturity (May 15)	Interest Rate (%)	Initial Yield (%)	CUSIP No.[1] Suffix	Principal Amount ($)	Stated Maturity (May 15)	Interest Rate (%)	Initial Yield (%)	CUSIP No.[1] Suffix
3,555,000	2026	5.000	0.440	KB7	5,305,000	2035	5.000	1.250[2]	KK7
3,735,000	2027	5.000	0.560	KC5	5,575,000	2036	5.000	1.290[2]	KL5
3,930,000	2028	5.000	0.710	KD3	5,830,000	2037	4.000	1.520[2]	KM3
4,130,000	2029	5.000	0.830	KE1	6,070,000	2038	4.000	1.590[2]	KN1
4,340,000	2030	5.000	0.900	KF8	6,350,000	2039	5.000	1.460[2]	KP6
4,565,000	2031	5.000	0.980[2]	KG6	6,575,000	2040	2.125	2.180	KQ4
4,800,000	2032	5.000	1.060[2]	KH4	6,815,000	2041	5.000	1.540[2]	KR2
5,045,000	2033	5.000	1.150[2]	KJ0	7,095,000	2042	3.000	1.960[2]	KS0

$69,675,000 Term Bonds

$5,530,000, 4.000%, Term Bond due May 15, 2046, Priced to Yield 1.860%[2], CUSIP No. Suffix[1] KU5
$26,250,000, 5.000%, Term Bond due May 15, 2046, Priced to Yield 1.660%[2], CUSIP No. Suffix[1] KT8
$37,895,000, 4.000%, Term Bond due May 15, 2050, Priced to Yield 1.900%[2], CUSIP No. Suffix[1] KV3

(Interest accrues from the Date of Delivery)

REDEMPTION.

Optional Redemption. The City has reserved the right, at its option, to redeem Bonds having stated maturities on and after May 15, 2031, in whole or in part, in principal amounts of $5,000 or any integral multiple thereof, on May 15, 2030, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption. (See "THE BONDS – Redemption – Optional Redemption" herein.)

Mandatory Redemption. The Bonds maturing on May 15, 2046 (4.00% coupon), May 15, 2046 (5.00% coupon), and May 15, 2050 are also subject to mandatory sinking fund redemption as described herein. (See "THE BONDS – Redemption – Mandatory Redemption" herein.)

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(1) CUSIP numbers are included solely for the convenience of owners of the Bonds. CUSIP is a registered trademark of the American Bankers Association. CUSIP data herein is provided by CUSIP Global Services, managed by S&P Global Market Intelligence on behalf of The American Bankers Association. This data is not intended to create a database and does not serve in any way as a substitute for the CUSIP Services. None of the City, the Board, the Co-Financial Advisors, or the Underwriters are responsible for the selection or correctness of the CUSIP numbers set forth herein.

(2) Yield calculated based on the assumption the Bonds denoted and sold at a premium will be redeemed on May 15, 2030, the first optional redemption date for such Bonds, at the price of par plus accrued interest to such date of redemption.

USE OF INFORMATION

This Official Statement, which includes the cover page and the Appendices hereto, does not constitute an offer to sell or the solicitation of an offer to buy in any jurisdiction to any person to whom it is unlawful to make such offer, solicitation or sale.

No dealer, broker, salesperson or other person has been authorized by the City, the Board, the Co-Financial Advisors, or the Underwriters to give information or to make any representation other than those contained in this Official Statement, and, if given or made, such other information or representations must not be relied upon as having been authorized by any of the foregoing.

The information set forth herein has been obtained from the City and other sources believed to be reliable, but such information is not guaranteed as to accuracy or completeness and is not to be construed as a representation, promise, or guarantee of the Co-Financial Advisors. This Official Statement contains, in part, estimates and matters of opinion which are not intended as statements of fact, and no representation is made as to the correctness of such estimates and opinions, or that they will be realized.

The information and expressions of opinion contained herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the City (including the System) or other matters described herein.

THE BONDS ARE EXEMPT FROM REGISTRATION WITH THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION AND CONSEQUENTLY HAVE NOT BEEN REGISTERED THEREWITH. THE REGISTRATION, QUALIFICATION, OR EXEMPTION FOR THE BONDS IN ACCORDANCE WITH APPLICABLE SECURITIES LAW PROVISIONS OF THE JURISDICTIONS IN WHICH THE BONDS HAVE BEEN REGISTERED, QUALIFIED, OR EXEMPTED SHOULD NOT BE REGARDED AS A RECOMMENDATION FOR THE PURCHASE THEREOF.

THE UNDERWRITERS HAVE PROVIDED THE FOLLOWING SENTENCE FOR INCLUSION IN THIS OFFICIAL STATEMENT. THE UNDERWRITERS HAVE REVIEWED THE INFORMATION IN THIS OFFICIAL STATEMENT IN ACCORDANCE WITH, AND AS PART OF, THEIR RESPONSIBILITIES TO INVESTORS UNDER THE FEDERAL SECURITIES LAWS AS APPLIED TO THE FACTS AND CIRCUMSTANCES OF THIS TRANSACTION, BUT THE UNDERWRITERS DO NOT GUARANTEE THE ACCURACY OR COMPLETENESS OF SUCH INFORMATION.

NONE OF THE CITY, THE BOARD, THE UNDERWRITERS, OR THE CO-FINANCIAL ADVISORS MAKE ANY REPRESENTATION OR WARRANTY WITH RESPECT TO THE INFORMATION CONTAINED IN THIS OFFICIAL STATEMENT REGARDING DTC OR ITS BOOK-ENTRY-ONLY SYSTEM, AS SUCH INFORMATION WAS PROVIDED BY DTC.

THE AGREEMENTS OF THE CITY, THE BOARD, AND OTHERS RELATED TO THE BONDS ARE CONTAINED SOLELY IN THE CONTRACTS DESCRIBED HEREIN. NEITHER THIS OFFICIAL STATEMENT NOR ANY OTHER STATEMENT MADE IN CONNECTION WITH THE OFFER OR SALE OF THE BONDS IS TO BE CONSTRUED AS CONSTITUTING AN AGREEMENT WITH THE PURCHASERS OF THE BONDS. INVESTORS SHOULD READ THE ENTIRE OFFICIAL STATEMENT, INCLUDING ALL APPENDICES ATTACHED HERETO, TO OBTAIN INFORMATION ESSENTIAL TO MAKING AN INFORMED INVESTMENT DECISION.

NEITHER THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS DOCUMENT. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

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CITY OFFICIALS, STAFF AND CONSULTANTS

ELECTED OFFICIALS – CITY OF SAN ANTONIO

City Council	Length of Service	Term Expires	Occupation
Ron Nirenberg, Mayor	7 Years, 2 Months	May 31, 2021	Broadcast General Manager
Roberto C. Treviño, District 1	5 Years, 7 Months	May 31, 2021	Architect
Jada L. Andrews-Sullivan, District 2	1 Year, 2 Months	May 31, 2021	Disabled Army Veteran
Rebecca J. Viagran, District 3	7 Years, 2 Months	May 31, 2021	Business Owner
Adriana Rocha Garcia, District 4	1 Year, 2 Months	May 31, 2021	Assistant Professor
Shirley Gonzales, District 5	7 Years, 2 Months	May 31, 2021	Business Owner
Melissa Cabello Havrda, District 6	1 Year, 2 Months	May 31, 2021	Attorney at Law
Ana Sandoval, District 7	3 Years, 2 Months	May 31, 2021	Entrepreneur
Manny Peláez, District 8	3 Years, 2 Months	May 31, 2021	Attorney at Law
John Courage, District 9	3 Years, 2 Months	May 31, 2021	Teacher
Clayton Perry, District 10	3 Years, 2 Months	May 31, 2021	Retired

APPOINTED OFFICIALS – SAN ANTONIO WATER SYSTEM BOARD OF TRUSTEES

Board	Length of Service	Term Expires	Occupation
Heriberto Guerra Chair	8 Years, 10 Months	May 31, 2018(1)	Chairman and CEO Avanzar Interior Technologies
Patricia Jasso Vice Chair	6 Years, 9 Months	May 31, 2020(1)	Retired
Amy Hardberger Secretary	2 Years, 4 Months	May 31, 2021	Associate Dean/Law Professor St. Mary's University
Patricia E. Merritt Assistant Secretary	6 Years, 9 Months	May 31, 2018(1)	Retired
David McGee Trustee	5 Years, 10 Months	May 31, 2021	President/CEO of San Antonio Region Amegy Bank of Texas
Eduardo Parra Trustee	2 Years, 4 Months	May 31, 2021	CEO – Principal Engineer Parra & Co., LLC
Ron Nirenberg, Mayor and Ex-Officio Member	3 Years, 0 Months	May 31, 2021	Broadcast General Manager

(1) Position to remain occupied by current member until either reappointed or a new member is appointed by City Council. Applications for appointment to the SAWS Board of Trustees are currently being accepted by City Council, with appointments expected to be finalized in August of 2020.

SELECTED ADMINISTRATIVE STAFF – SAN ANTONIO WATER SYSTEM

Name	Position	Length of Service with System	Total Government Service
Robert R. Puente	President/Chief Executive Officer	12 Years, 2 Months	29 Years, 6 Months
Steven M. Clouse	Senior Vice President/Chief Operating Officer	29 Years, 11 Months	31 Years, 8 Months
Douglas P. Evanson	Senior Vice President/Chief Financial Officer	15 Years, 2 Months	15 Years, 2 Months
Nancy Belinsky	Vice President and General Counsel	17 Years, 3 Months	17 Years, 3 Months
Sharon De La Garza	Vice President - Human Resources	8 Years, 3 Months	24 Years, 3 Months
Donovan Burton	Vice President – Water Resources & Governmental Relations	13 Years, 7 Months	28 Years, 0 Months
Gavino Ramos	Vice President – Communications & External Affairs	5 Years, 3 Months	5 Years, 3 Months

CONSULTANTS AND ADVISORS

Special Counsel to the Board .... Langley & Banack, Incorporated
San Antonio, Texas

Auditors .... Baker Tilly Virchow Krause, LLP
San Antonio, Texas

Co-Bond Counsel .... Norton Rose Fulbright US LLP
San Antonio, Texas
and
Escamilla & Poneck, LLP
San Antonio, Texas

Co-Financial Advisors .... PFM Financial Advisors LLC
Arlington, Virginia
and
Estrada Hinojosa & Company, Inc.
San Antonio, Texas

For additional information regarding the San Antonio Water System, please contact:

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or

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don@ehmuni.com

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SELECTED ADMINISTRATIVE STAFF – CITY OF SAN ANTONIO

Name	Position	Tenure with City of San Antonio	Tenure in Current Position
Erik J. Walsh	City Manager	26 Years, 0 Months	1 Year, 3 Months
Maria Villagomez	Deputy City Manager	22 Years, 8 Months	1 Year, 3 Months
Lori Houston	Assistant City Manager	18 Years, 0 Months	4 Years, 11 Months
Carlos Contreras	Assistant City Manager	11 Years, 4 Months	7 Years, 7 Months
Dr. Colleen Bridger	Assistant City Manager	3 Years, 3 Months	1 Year, 3 Months
Roderick Sanchez	Assistant City Manager	27 Years, 5 Months	3 Years, 4 Months
Andrew Segovia	City Attorney	3 Years, 9 Months	3 Years, 9 Months
Tina J. Flores	City Clerk	18 Years, 0 Months	0 Years, 1 Month
Ben Gorzell, Jr.	Chief Financial Officer	29 Years, 7 Months	9 Years, 10 Months
Troy Elliott	Deputy Chief Financial Officer	23 Years, 10 Months	3 Years, 11 Months
Justina Tate	Director of Management and Budget	10 Years, 4 Months	3 Years, 4 Months

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OFFICIAL STATEMENT

RELATING TO

$153,390,000
CITY OF SAN ANTONIO, TEXAS
(A political subdivision of the State of Texas located primarily in Bexar County)
WATER SYSTEM JUNIOR LIEN REVENUE BONDS, SERIES 2020C (NO RESERVE FUND)

INTRODUCTION

This Official Statement, which includes the Appendices hereto, provides certain information regarding the issuance of $153,390,000 City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020C (No Reserve Fund) (the "Bonds"). Capitalized terms used in this Official Statement have the same meanings assigned to such terms in the Ordinance (hereinafter defined), except as otherwise indicated herein (see "SELECTED PROVISIONS OF THE ORDINANCE" in APPENDIX D).

There follows in this Official Statement descriptions of the Bonds and certain information regarding the San Antonio Water System ("SAWS"), its water and wastewater system (the "System") and its finances. All descriptions of documents contained herein are only summaries and are qualified in their entirety by reference to each such document. Copies of such documents may be obtained from the Co-Financial Advisors, PFM Financial Advisors LLC, Arlington, Virginia, and Estrada Hinojosa & Company, Inc., San Antonio, Texas, by electronic mail or upon payment of reasonable copying, handling, and delivery charges.

This Official Statement speaks only as of its date, and the information contained herein is subject to change. A copy of the final Official Statement will be filed with the Municipal Securities Rulemaking Board ("MSRB") through its Electronic Municipal Market Access ("EMMA") system. See "CONTINUING DISCLOSURE OF INFORMATION" for a description of the undertaking of the City of San Antonio, Texas (the "City") to provide certain information on a continuing basis.

DESCRIPTION OF THE CITY

The City is a political subdivision and municipal corporation of the State of Texas (the "State" or "Texas") duly organized and existing under the laws of the State, including the City's Home Rule Charter. The City was incorporated in 1837, and first adopted its Home Rule Charter in 1951. The City operates under a Council/Manager form of government with a City Council comprised of the Mayor and 10 Councilmembers. The terms of the Mayor and the Councilmembers are two years and subject to four term limitations imposed in the City's Home Rule Charter. The City Manager is the chief administrative officer for the City. Some of the services that the City provides are: public safety (police and fire protection), highways and streets, electric, gas, water and sanitary sewer utilities, health and social services, culture/recreation and parks, public transportation, public improvements, planning and zoning, and general administrative services. The 2010 Census population for the City was 1,327,407 and for Bexar County was 1,714,773. For the 2010 San Antonio population, it was determined that the U.S. Census Bureau had erroneously assigned 35 census blocks to the City that are actually outside of the City limits. The revised 2010 San Antonio population is 1,326,539. The U.S. Census Bureau ranks the City as the second largest city in Texas and the seventh largest city in the United States. The City's Information Technology Services Department estimated the City's population to be 1,507,192 in 2019. The City covers approximately 515 square miles within Bexar County. For additional information regarding the City, see "APPENDIX A - GENERAL INFORMATION REGARDING THE CITY".

CITY'S COMBINED WATER AND WASTEWATER SYSTEM

The System consists of the City's combined water and wastewater system. Management, operation, and maintenance of the System is vested in the SAWS Board of Trustees (the "Board" or the "Board of Trustees") under the various City ordinances authorizing the issuance of SAWS debt obligations, including the Ordinance.

INFECTIOUS DISEASE OUTBREAK – COVID-19

The outbreak of COVID-19, a respiratory disease caused by a new strain of coronavirus, has been characterized as a pandemic (the "Pandemic") by the World Health Organization and it continues to affect many parts of the world, including the United States and Texas. On January 31, 2020, the Secretary of the United States Health and Human Services Department declared a public health emergency for the United States and on March 13, 2020, the President of the United States declared the outbreak of COVID-19 in the United States a national emergency. Subsequently, the President's Coronavirus Guidelines for America and the United States Centers for Disease Control and Prevention called upon Americans to take actions to slow the spread of COVID-19 in the United States.

On March 13, 2020, the Governor of Texas (the "Governor") declared a state of disaster for all counties in Texas in response to the Pandemic. Pursuant to Chapter 418 of the Texas Government Code, the Governor has broad authority to respond to disasters, including suspending any regulatory statute prescribing the procedures for conducting state business or any order or rule of a state agency that would in any way prevent, hinder, or delay necessary action in coping with the disaster, and issuing executive orders that have the force and effect of law. The Governor has since issued a number of executive orders relating to COVID-19 preparedness and mitigation. These include executive orders which have, among other things, imposed limitations on social gatherings and closed schools throughout the State through the remainder of the 2019-20 school year. In addition to the actions by the state and federal officials, certain local officials, including the City and Bexar County, Texas, have declared a local state of disaster and have issued "Stay Home-Work Safe" orders. Many of the federal, state and local actions and policies under the aforementioned disaster declarations and Stay Home-Work Safe orders are focused on limiting instances where the public can congregate or interact with each other, which affects the operation of businesses and directly impacts the economy. The Governor's Report to Open Texas, issued on April 27, 2020, and subsequent executive orders, had instituted a gradual reopening of businesses on a staggered basis with adherence to specified health protocols. On June 4, 2020, the City and County officially lifted their respective Stay Home-Work Safe measures, primarily relying on the Texas Governor's executive orders for reopening businesses. However, on June 26, 2020, due to substantial increases in COVID-19 positive cases, positivity rates and hospitalizations, the Governor issued adjustments to the re-opening plan, limiting and slowing the gradual reopening to reduce the growing spread of COVID-19. Further, on July 2, 2020, the Governor issued a new executive order requiring face coverings in certain counties and issued a proclamation related to limiting gathering sizes and requiring social distancing. Shortly after the Governor's actions, the Mayor of the City and the County Judge of Bexar County implemented similar directives designed to more effectively reduce the spread of COVID-19.

The Pandemic has negatively affected travel, commerce, and financial markets globally, and is widely expected to continue to negatively affect economic output worldwide and within the City and Bexar County. These negative impacts may reduce or otherwise negatively affect Net Revenues of the System which are pledged on a junior lien basis as security for the Bonds. Neither the City nor SAWS, however, can predict the effect of the continued spread of COVID-19 on the finances or operations and maintenance of the City or the System, respectively.

SAWS continues to monitor the spread of COVID-19 and is working with local, state, and national agencies to address the potential impact of the Pandemic on the System. As part of its business continuity protocols, SAWS has implemented measures to protect the health of its employees, contractors and customers and to ensure the continuity of its business operations and the delivery of water and sewer services to the San Antonio community. Most of the System's employees who do not work directly in the continuous provision of water and wastewater services to SAWS customers are working remotely from home. Additionally, SAWS is requiring temperature screening to gain access to SAWS facilities and the wearing of face coverings for anyone at a job site or on SAWS property when social distancing is not possible.

FINANCIAL IMPACT OF COVID-19

As a result of the COVID-19 pandemic, SAWS has experienced a recent reduction in the level of water usage by its commercial and industrial customers. Additionally, in March, SAWS implemented a number of temporary measures intended to assist SAWS customers experiencing financial hardship due to COVID-19. These measures include (i) deferring disconnections of water service for non-payment, (ii) waiving of late fees, and (iii) promoting payment plans, including offering extended terms beyond those normally offered. These efforts are still in place with no final determination with respect to the ultimate cessation of these measures having been made as of this time. Implementation of these measures has resulted in an increase in both the number and dollar amount of delinquent account balances. To account for this increase, SAWS has also increased the level of its allowance for uncollectable accounts from $6.2 million as of December 31, 2019 to $13.1 million as of June 30, 2020.

At the SAWS Board meeting on May 5, 2020, staff presented certain financial projections developed to take into account the potential financial impact of COVID-19 on SAWS financial results for the fiscal year ending December 31, 2020. The projections presented showed that despite the potential for lower than budgeted levels of revenue, it was anticipated that any such revenue shortfalls would be largely or completely offset by lower than budgeted operating and maintenance expenses as well as less than originally forecast interest expense. These projected expense reductions primarily reflect a delay in spending on planned operational initiatives, lower than forecast purchased water costs, and reduced interest costs on the System's borrowing attributable to the timing of planned issuances as well as a refinancing of debt obligations in January 2020. SAWS most recent actual monthly financial results show that through June 30, 2020, operating revenues are $13.1 million less than budget while, over this same time period, operating expenses before depreciation are $25.4 million less than budget.

See "APPENDIX C – UNAUDITED FINANCIAL STATEMENTS (THROUGH JUNE 30, 2020)" for current financial information compared to the prior year.

The financial and operating data contained herein are the latest available. These results may or may not be indicative of SAWS' future financial and operational performance. SAWS cannot predict the duration or ultimate extent of the COVID-19 outbreak. The continuation of the COVID-19 outbreak and the measures instituted to control it could have an adverse effect on SAWS' operations and financial condition, and the effect could be material.

THE BONDS

DESCRIPTION OF THE BONDS

The Bonds are dated July 1, 2020, and mature on May 15 in each of the years and in the amounts shown on the inside cover page hereof. Interest will accrue from their date of initial delivery to the initial purchasers identified on the front cover hereof (the "Underwriters"), will be computed on the basis of a 360-day year composed of twelve 30-day months, and will be payable on May 15 and November 15, commencing May 15, 2021. The definitive Bonds will be issued only in fully registered form in any integral multiple of $5,000 for any one maturity and will be initially registered and delivered only to Cede & Co., the nominee of DTC, pursuant to the Book-Entry-Only System described herein. **No physical delivery of the Bonds will be made to the owners thereof.** Principal of, premium, if any, and interest on the Bonds will be payable by the Paying Agent/Registrar to Cede & Co., which will make distribution of the amounts so paid to the participating members of DTC for subsequent payment to the beneficial owners of the Bonds (see "THE BONDS – Book-Entry-Only System" herein).

Proceeds from the sale of the Bonds will be used to provide funds for the purposes of (i) building, improving, extending, enlarging, equipping, and repairing the System, and (ii) paying the costs of issuance of the Bonds. (see "SOURCES AND USES OF BOND PROCEEDS" herein).

AUTHORITY FOR ISSUANCE

The Bonds are issued pursuant to the Constitution and the general laws of the State of Texas, including particularly Chapter 1371, Texas Government Code, as amended (the "Act" or "Chapter 1371"), and Chapter 1502, Texas Government Code, as amended, the City's Home Rule Charter, and an ordinance (the "Ordinance") authorizing the issuance of the Bonds adopted by the City Council of the City (the "City Council") on June 25, 2020. As permitted by the Act, the City Council has, in the Ordinance, delegated to certain authorized officials of the City and SAWS (each an "Authorized Official") the authority to establish final terms of sale of the Bonds. These final sales terms are evidenced in an "Approval Certificate" executed by an Authorized Official on July 21, 2020.

The Bonds are issued as Junior Lien Obligations–No Reserve Fund and, as a result thereof, the Bonds are not additionally benefited by the creation and establishment of a Reserve Fund (see “SECURITY FOR THE BONDS – Parity Lien Ordinance Amendment” herein).

SECURITY AND SOURCE OF PAYMENT; PLEDGE OF NET REVENUES

The Bonds are special obligations of the City, payable both as to principal and interest, solely from and secured by, together with the other Junior Lien Obligations (as described herein), a junior lien on and pledge of the Net Revenues of the System remaining after satisfaction of all City payment and reserve fund obligations, among other matters, relating to the Senior Lien Obligations. **The Bonds are not additionally benefited by the creation and establishment of a Reserve Fund. The City has not covenanted or obligated itself to pay the Bonds from money raised or to be raised from taxation.**

All Net Revenues of the System remaining after satisfaction of financial obligations of the City resulting from the prior pledge thereof and lien thereon securing the payment of the Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City (as defined in the Ordinance) have been irrevocably pledged to the payment and security of the Junior Lien Obligations, which includes the Bonds, the Previously Issued Junior Lien Obligations, the Junior Lien Obligations–No Reserve Fund, and any Additional Junior Lien Obligations hereafter issued by the City (as each such term is defined in the Ordinance), including the establishment and maintenance of special funds or accounts created for the payment and security thereof. This pledge constitutes a junior lien on the Net Revenues of the System. In addition to the foregoing, the City has, in the Ordinance, reserved the right to pledge, and has in fact pledged, on a subordinate and inferior lien level of priority to the pledge thereof and lien thereon securing the payment of the Junior Lien Obligations, the Net Revenues of the System as security for the Subordinate Lien Obligations (as defined in the Ordinance), as well as the right to pledge, on a further subordinated and inferior lien level of priority to the pledge thereof and lien thereon securing the payment of the Subordinate Lien Obligations, the Net Revenues of the System as security for the Inferior Lien Obligations (as defined in the Ordinance). To date, the City has not issued any Inferior Lien Obligations. For a complete description of the security for the Bonds, see “SECURITY FOR THE BONDS” herein.

PERFECTION OF SECURITY FOR THE BONDS

Chapter 1208, Texas Government Code, as amended, applies to the issuance of the Bonds and the pledge of the Net Revenues, and such pledge is therefore, valid, effective, and perfected. Should Texas law be amended while the Bonds are outstanding and unpaid, the result of such amendment being that the pledge of the Net Revenues is to be subject to the filing requirements of Chapter 9, Texas Business and Commerce Code, as amended, in order to preserve to the registered owners of the Bonds a security interest in such pledge, the City has covenanted in the Ordinance to take such measures as it determines is reasonable and necessary to enable a filing of a security interest in said pledge to occur.

OUTSTANDING DEBT

As of the date of delivery of the Bonds, the City will have outstanding the Senior Lien Obligations secured by and payable from Net Revenues as follows:

Dated Date	Outstanding Debt ($)[1]	Issue Description
November 1, 2009	72,085,000	Water System Revenue Bonds, Taxable Series 2009B (Direct Subsidy - Build America Bonds)
November 15, 2010	29,750,000	Water System Revenue Bonds, Taxable Series 2010B (Direct Subsidy - Build America Bonds)
March 15, 2011	24,560,000	Water System Revenue Refunding Bonds, Series 2011
February 1, 2012	75,450,000	Water System Revenue Refunding Bonds, Series 2012
September 1, 2012	120,105,000	Water System Revenue and Refunding Bonds, Series 2012A
Total	321,950,000	

[1] Unaudited. As of the date of delivery of the Bonds.

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In addition to the outstanding Senior Lien Obligations presented above, the City will have outstanding the Junior Lien Obligations secured by and payable from Net Revenues as follows:

Dated Date	Outstanding Debt ($)[1]	Issue Description
November 1, 2009	23,585,000	Water System Junior Lien Revenue and Refunding Bonds, Series 2009A
May 15, 2011	14,025,000	Water System Junior Lien Revenue Bonds, Series 2011
May 15, 2011	14,060,000	Water System Junior Lien Revenue and Refunding Bonds, Series 2011A
April 1, 2012	5,530,000	Water System Junior Lien Revenue Refunding Bonds, Series 2012 (No Reserve Fund)
August 1, 2012	14,950,000	Water System Junior Lien Revenue Bonds, Series 2012
April 1, 2013	33,250,000	Water System Junior Lien Revenue Bonds, Series 2013A
May 1, 2013	56,145,000	Water System Junior Lien Revenue Refunding Bonds, Series 2013B (No Reserve Fund)
October 1, 2013	17,870,000	Water System Junior Lien Revenue Bonds, Series 2013C
October 1, 2013	49,235,000	Water System Junior Lien Revenue Bonds, Series 2013D
October 1, 2013	53,570,000	Water System Junior Lien Revenue and Refunding Bonds, Series 2013E (No Reserve Fund)
October 1, 2013	98,795,000	Water System Variable Rate Junior Lien Revenue and Refunding Bonds, Series 2013F (No Reserve Fund)
April 1, 2014	73,560,000	Water System Junior Lien Revenue and Refunding Bonds, Series 2014A (No Reserve Fund)
April 1, 2014	99,590,000	Water System Variable Rate Junior Lien Revenue and Refunding Bonds, Series 2014B (No Reserve Fund)
May 15, 2014	31,835,000	Water System Junior Lien Revenue Bonds, Series 2014C
June 1, 2014	16,085,000	Water System Junior Lien Revenue Bonds, Series 2014D
January 1, 2015	65,015,000	Water System Junior Lien Revenue Bonds, Series 2015A
February 1, 2015	284,225,000	Water System Junior Lien Revenue and Refunding Bonds, Series 2015B (No Reserve Fund)
January 1, 2016	154,465,000	Water System Junior Lien Revenue Refunding Bonds, Series 2016A (No Reserve Fund)
January 1, 2016	12,770,000	Water System Junior Lien Revenue Refunding Bonds, Taxable Series 2016B (No Reserve Fund)
October 1, 2016	298,200,000	Water System Junior Lien Revenue and Refunding Bonds, Series 2016C (No Reserve Fund)
December 1, 2016	11,180,000	Water System Junior Lien Revenue Bonds, Series 2016D
December 1, 2016	12,855,000	Water System Junior Lien Revenue Bonds, Series 2016E
January 1, 2017	73,295,000	Water System Junior Lien Revenue Refunding Bonds, Series 2017A (No Reserve Fund)
May 1, 2018	204,275,000	Water System Junior Lien Revenue and Refunding Bonds, Series 2018A (No Reserve Fund)
April 1, 2018	9,915,000	Water System Junior Lien Revenue Bonds, Series 2018B
January 1, 2019	166,480,000	Water System Variable Rate Junior Lien Revenue Bonds, Series 2019A (No Reserve Fund)
September 1, 2019	29,780,000	Water System Junior Lien Revenue Bonds, Series 2019B
September 1, 2019	81,380,000	Water System Junior Lien Revenue Refunding Bonds, Series 2019C (No Reserve Fund)
January 1, 2020	276,815,000	Water System Junior Lien Revenue and Refunding Bonds, Series 2020A (No Reserve Fund)
February 1, 2020	25,285,000	Water System Junior Lien Revenue Bonds, Series 2020B
July 1, 2020	153,390,000	The Bonds
Total	2,461,410,000	

(1) Unaudited. As of the date of delivery of the Bonds.

In addition to the outstanding Senior Lien Obligations and Junior Lien Obligations presented above, as of the date of delivery of the Bonds, the City expects to have outstanding the following Subordinate Lien Obligations secured by and payable from Net Revenues as follows:

	Authorized Amount ($)	Amount Outstanding ($)[1]	Issue Description
	398,000,000[2][4]	116,260,000	Water System Commercial Paper Notes, Subseries A-1
	2,000,000[3][4]	2,000,000[3]	Water System Commercial Paper Notes, Subseries A-2
	-	-	Water System Commercial Paper Notes, Series B
	100,000,000[5]	100,000,000	Water System Commercial Paper Notes, Series C
Total	500,000,000[6]	218,260,000	

(1) Unaudited. As of the date of delivery of the Bonds.
(2) Represents the liquidity support available after the reduction of the amount required to be outstanding under the liquidity facility provided for in the hereinafter-defined Subseries A-2 Notes. See "COMMERCIAL PAPER NOTE PROGRAM" herein.
(3) Amount required to remain outstanding during the term of the liquidity facility provided therefor. See "COMMERCIAL PAPER NOTE PROGRAM" herein.
(4) JPMorgan (defined herein) supports the Series A Notes in the total amount of $400,000,000. See "COMMERCIAL PAPER NOTE PROGRAM" herein.
(5) Represents the liquidity support available from Wells Fargo (defined herein). See "COMMERCIAL PAPER NOTE PROGRAM" herein.
(6) Represents the combined authorization of the Series A Notes (including Subseries A-1 and Subseries A-2), the Series B Notes and the Series C Notes. See "COMMERCIAL PAPER NOTE PROGRAM" herein.

None of the above obligations, including the Bonds, are a charge upon any other income or revenues of the City, other than Net Revenues, and will never constitute an indebtedness or pledge of the general credit or taxing powers of the City. The Ordinance does not create a lien or mortgage on the System, except the Net Revenues with respect to the Bonds, and no judgment against the City may be enforced by levy and execution against any property owned by the City.

See the "Combined System Revenue Debt Service Requirements" table under "DEBT AND OTHER FINANCIAL INFORMATION" for a description of the debt service requirements on all outstanding indebtedness issued by the City for the benefit of the System.

FLOW OF FUNDS

The flow of funds of the System requires that Gross Revenues of the System be applied in sequence to: (i) current Maintenance and Operating Expenses, including maintenance of an operating reserve equal to two months of expenses for the current Fiscal Year; (ii) payment of amounts required on any Senior Lien Obligations issued by the City; (iii) payment of amounts required on any Junior Lien Obligations issued by the City; (iv) payment of amounts required on any Subordinate Lien Obligations issued by the City; (v) payment of amounts required on any Inferior Lien Obligations issued by the City; and (vi) transfers to the City's General Fund and to the Renewal and Replacement Fund. The Commercial Paper Note Program (under which the City may issue Series A Notes (in subseries form), Series B Notes and Series C Notes (each defined herein) in a combined amount not to exceed $500,000,000; see "COMMERCIAL PAPER NOTE PROGRAM" herein) represents the City's only currently outstanding Subordinate Lien Obligations, but it is authorized to issue Additional Subordinate Lien Obligations. The City has not issued any Inferior Lien Obligations, but the City is authorized to do so under the Ordinance. (See "THE BONDS – Security and Source of Payment; Pledge of Net Revenues" herein; see also "SECURITY FOR THE BONDS – Flow of Funds" and "APPENDIX D - SELECTED PROVISIONS OF THE ORDINANCE" herein).

RATES

The City has covenanted in the Ordinance that it will at all times charge and collect rates for services rendered by the System sufficient to (i) pay all Maintenance and Operating Expenses of the System, (ii) produce "Pledged Revenues" (substantively defined in the Ordinance to mean the senior and superior lien on and pledge of Net Revenues of the System securing the repayment of the Senior Lien Obligations and any Additional Senior Lien Obligations, plus any additional revenues, income, receipts, or other resources of the City pledged as security for the Senior Lien Obligations) at least equal to 1.25 times the interest on and the principal of the Senior Lien Obligations and the amounts required to be deposited in any reserve or contingency fund created for the payment and security of the Senior Lien Obligations, (iii) produce Net Revenues, together with any other lawfully available funds, to pay the principal of and interest on the currently outstanding Junior Lien Obligations, which includes the Bonds, as the same become due and payable and to deposit the amounts required to be deposited in any special fund or account created and established for the payment and security of any Additional Junior Lien Obligations hereafter issued by the City, and (iv) to produce Net Revenues to pay such other amounts and to make such transfers as described in the Ordinance. See "SECURITY FOR THE BONDS – Rate Covenant" for a description of additional rate covenants of the City.

ADDITIONAL OBLIGATIONS

In the Ordinance, the City has reserved the right to issue (i) Additional Senior Lien Obligations, which are primarily secured by and payable from a lien on and pledge of the Net Revenues of the System (included in the definition of Pledged Revenues) that is senior and superior to the pledge thereof and lien thereon securing the Bonds, (ii) Additional Junior Lien Obligations, which are secured by and payable from a lien on and pledge of the Net Revenues of the System on parity with the pledge thereof and lien thereon securing the Bonds, (iii) Additional Subordinate Lien Obligations, which are primarily secured by and payable from a lien on and pledge of the Net Revenues of the System that is subordinate and inferior to the pledge thereof and lien thereon securing the Bonds, and (iv) Inferior Lien Obligations, which are primarily secured by and payable from a lien on and pledge of the Net Revenues of the System that is further subordinated and inferior to the pledge thereof and lien thereon securing the Subordinate Lien Obligations and any Additional Subordinate Lien Obligations.

The issuance of Additional Senior Lien Obligations is subject to the requirements of the ordinances of the City authorizing the respective issuance of Senior Lien Obligations and include, as the primary threshold matter, the ability to demonstrate that the Pledged Revenues, for the preceding Fiscal Year or for any 12 consecutive calendar month period out of the 18-month period ending not more than ninety (90) days preceding the month the ordinance authorizing the issuance of the Additional Senior Lien Obligations is adopted, are equal to at least 125% of the maximum annual debt service requirements for all Senior Lien Obligations to be outstanding after giving effect to the issuance of the Additional Senior Lien Obligations then proposed.

The City's issuance of Additional Junior Lien Obligations payable from a parity lien pledge of the Net Revenues, which (together with the Previously Issued Junior Lien Obligations and the Junior Lien Obligations–No Reserve Fund (which includes the Bonds)) will be equally and ratably secured by a junior lien on and pledge of the Net Revenues of the System, is subject to complying with certain conditions in the Ordinance. For the issuance of Additional Junior Lien Obligations the repayment of which is not insured by a municipal bond insurance policy and that are not sold to the Texas Water Development Board ("TWDB"), and in addition to certain other covenants, the Net Revenues, for the preceding Fiscal Year or for any 12 consecutive calendar month period out of the 18-month period preceding the month the ordinance authorizing the issuance of the Additional Junior Lien Obligations is adopted, must be equal to at least the average annual requirement for the payment of principal of and interest on all outstanding Junior Lien Obligations after giving effect to the Additional Junior Lien Obligations then proposed. For the issuance of Additional Junior Lien Obligations the repayment of which is not insured by a municipal bond insurance policy and that are sold to the TWDB, the City must show that Net Revenues for the same reporting period identified above are at least equal to one and one-fourth times the average annual requirement for the payment of principal of and interest on all outstanding Junior Lien Obligations after giving effect to the Additional Junior Lien Obligations then proposed. The issuance of Additional Junior Lien Obligations that are Reserve Fund–Secured Junior Lien Obligations (defined herein) also requires satisfaction of certain conditions precedent, including additionally funding, as necessary, the Reserve Fund. (See "SECURITY FOR THE BONDS – Reserve Fund" herein). The Ordinance also specifies the conditions upon which Additional Subordinate Lien Obligations and Inferior Lien Obligations may be issued. See "APPENDIX D – SELECTED PROVISIONS OF THE ORDINANCE" for terms and conditions to be satisfied for the issuance of Additional Junior Lien Obligations herein.

Redemption

Optional Redemption. The City reserves the right, at its option, to redeem Bonds having stated maturities on and after May 15, 2031, in whole or in part in principal amounts of $5,000 or any integral multiple thereof, on May 15, 2030, or any date thereafter, at the par value thereof plus accrued interest to the date of redemption.

Mandatory Redemption. The Bonds maturing on May 15, 2046 (4.00% coupon), May 15, 2046 (5.00% coupon), and May 15, 2050 (the "Term Bonds") are subject to mandatory sinking fund redemption prior to their stated maturities from money required to be deposited in the Bond Fund for such purpose and shall be redeemed in part, by lot or other customary method, at the principal amount thereof plus accrued interest to the date of mandatory sinking fund redemption in the principal amounts on May 15 in each of the years as set forth below.

Term Bonds Stated to Mature on May 15, 2046 (4.00% Coupon)		Term Bonds Stated to Mature on May 15, 2046 (5.00% Coupon)		Term Bonds Stated to Mature on May 15, 2050	
Year	Principal Amount ($)	Year	Principal Amount ($)	Year	Principal Amount ($)
2043	1,350,000	2043	6,030,000	2047	8,915,000
2044	1,380,000	2044	6,365,000	2048	9,275,000
2045	1,380,000	2045	6,745,000	2049	9,655,000
2046	1,420,000*	2046	7,110,000*	2050	10,050,000*

*Payable at stated maturity.

The principal amount of a Term Bond required to be redeemed pursuant to the operation of the mandatory sinking fund redemption provisions shall be reduced, at the option of the City, by the principal amount of any Term Bond of such stated maturity which, at least 50 days prior to the mandatory sinking fund redemption date, (1) shall have been defeased or acquired by the City and delivered to the Paying Agent/Registrar for cancellation, (2) shall have been purchased and cancelled by the Paying Agent/Registrar at the request of the City with money in the Bond Fund, or (3) shall have been redeemed pursuant to the optional redemption provisions, if any, set forth above and not theretofore credited against a mandatory sinking fund redemption requirement.

Selection of Bonds for Redemption

If less than all of the Bonds are to be redeemed, the City may select the maturities of Bonds to be redeemed. If less than all the Bonds of any maturity are to be redeemed, the Paying Agent/Registrar (or DTC while the Bonds are in Book-Entry-Only form) shall determine by lot the Bonds, or portions thereof, within such maturity to be redeemed. If a Bond (or any portion of the principal sum thereof) shall have been called for redemption and notice of such redemption shall have been given, such Bond (or the principal amount thereof to be redeemed) shall become due and payable on such redemption date and interest thereon shall cease to accrue from and after the redemption date, provided funds for the payment of the redemption price and accrued interest thereon are held by the Paying Agent/Registrar on the redemption date.

Bonds of a denomination larger than $5,000 may be redeemed in part ($5,000 or any integral multiple thereof). Any Bond to be partially redeemed must be surrendered in exchange for one or more new Bonds of the same stated maturity and interest rate for the unredeemed portion of the principal.

Notice of Redemption

Not less than 30 days prior to a redemption date for the Bonds, the City shall cause a notice of redemption to be sent by United States mail, first class, postage prepaid, to the registered owners of the Bonds to be redeemed, in whole or in part, at the address of the registered owner appearing on the registration books of the Paying Agent/Registrar at the close of business on the business day next preceding the date of mailing such notice. By the date fixed for such redemption, due provision must be made with the Paying Agent/Registrar for the payment of the required redemption price for the Bonds or portions thereof which are to be so redeemed. ANY NOTICE SO MAILED SHALL BE CONCLUSIVELY PRESUMED TO HAVE BEEN DULY GIVEN, WHETHER OR NOT THE REGISTERED OWNER RECEIVES SUCH NOTICE. NOTICE HAVING BEEN SO GIVEN, AND SUCH PROVISION MADE FOR THE PAYMENT OF THE BONDS, THE BONDS CALLED FOR REDEMPTION SHALL BECOME DUE AND PAYABLE ON THE SPECIFIED REDEMPTION DATE, AND NOTWITHSTANDING THAT ANY BOND OR PORTION THEREOF HAS NOT BEEN SURRENDERED FOR PAYMENT, INTEREST ON SUCH BOND OR PORTION THEREOF SHALL CEASE TO ACCRUE AFTER THE DATE FIXED FOR REDEMPTION, AND THEY WILL NOT BE REGARDED AS BEING OUTSTANDING EXCEPT FOR THE RIGHT OF THE REGISTERED OWNER TO RECEIVE THE REDEMPTION PRICE FROM THE PAYING AGENT/REGISTRAR OUT OF THE FUNDS PROVIDED FOR SUCH PAYMENT.

The Paying Agent/Registrar and the City, so long as a Book-Entry-Only System is used for the Bonds, will send any notice of redemption, notice of proposed amendment to the Ordinance or other notices with respect to the Bonds only to DTC. Any failure by DTC to advise any Direct Participant (hereinafter defined), or of any Direct Participant or Indirect Participant (hereinafter defined) to notify the Beneficial Owner (hereinafter defined), will not affect the validity of the redemption of the Bonds called for redemption or any other action premised on any such notice. Redemption of portions of the Bonds by the City will reduce the outstanding principal amount of such Bonds held by DTC. In such event, DTC may implement, through its Book-Entry-Only System, a redemption of such Bonds held for the account of Direct Participants in accordance with its rules or other agreements with Direct Participants and then Direct Participants and Indirect Participants may implement a redemption of such Bonds from the Beneficial Owners. Any such selection of Bonds to be redeemed will not be governed by the Ordinance and will not be conducted by the City or the Paying Agent/Registrar. Neither the City nor the Paying Agent/Registrar will have any responsibility to Direct Participants, Indirect Participants or the persons for whom Direct Participants act as nominees, with respect to the payments on the Bonds or the providing of notice to Direct Participants, Indirect Participants, or Beneficial Owners of the selection of portions of the Bonds for redemption.

AMENDMENTS

Subject to the provisions of the Ordinance, the City may amend the Ordinance without the consent of or notice to any registered owners of Bonds in any manner not detrimental to the interests of such registered owners, including the curing of any ambiguity, inconsistency, or formal defect or omission therein. In addition, the City may, with the written consent of the registered owners of a majority in aggregate principal amount of the Bonds then outstanding affected thereby, amend, add to, or rescind any of the provisions of the Ordinance; except that, without the consent of the registered owners of all of the Bonds, no such amendment, addition, or rescission may (i) change the date specified as the date on which the principal of or any installment of interest on any Bond is due and payable, reduce the principal amount thereof, the rate of interest thereon, or the redemption price therefor, change the place or places at or the coin or currency in which any Bond or interest thereon is payable, or in any other way modify the terms of payment of the principal of or interest on the Bonds, (ii) give any preference to any Bond over any other Bond, or (iii) reduce the aggregate principal amount of Bonds required for consent to any amendment, addition, or rescission.

DEFEASANCE

The Ordinance provides that any Bond will be deemed paid and will no longer be considered to be outstanding within the meaning of the Ordinance when payment of principal of and interest on such Bond to its stated maturity or date of prior redemption has been made or provided for. Payment may be provided for by deposit of any combination of (i) money in an amount sufficient to make such payment and/or (ii) Government Securities (defined herein). Any such deposit must be certified by an independent public accountant, the System's Co-Financial Advisor, the Paying Agent/Registrar, or another qualified third party certifying as to such maturities and interest payment dates and bear such interest as will, without further investment or reinvestment of either the principal amount thereof or the interest earnings therefrom, be sufficient to make such payment. The Ordinance provides that "Government Securities" means (a) direct, noncallable obligations of the United States of America, including obligations that are unconditionally guaranteed by the United States of America, (b) noncallable obligations of an agency or instrumentality of the United States of America, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that are rated as to investment quality by a nationally recognized investment rating firm not less than "AAA" or its equivalent, (c) noncallable obligations of a state or an agency or a county, municipality, or other political subdivision of a state that have been refunded and that are rated as to investment quality by a nationally recognized investment rating firm not less than "AAA" or its equivalent, and (d) any additional securities and obligations hereafter authorized by Texas law as eligible for use to accomplish the discharge of obligations such as the Bonds. There is no assurance that the ratings for U.S. Treasury securities acquired to defease any Bonds, or those for any other Government Securities, will be maintained at any particular rating category. Further, there is no assurance that current Texas law will not be amended in a manner that expands or contracts the list of permissible defeasance securities (such list consisting of those securities identified in clauses (a) through (c) above), or any rating requirement thereon, that may be purchased with defeasance proceeds relating to the Bonds ("Defeasance Proceeds"), though the City has reserved the right to utilize any additional securities for such purpose in the event the aforementioned list is expanded. Because the Ordinance does not contractually limit such permissible defeasance securities and expressly recognizes the ability of the City to use lawfully available Defeasance Proceeds to defease all or any portion of the Bonds, registered owners of Bonds are deemed to have consented to the use of Defeasance Proceeds to purchase such other defeasance securities, notwithstanding the fact that such defeasance securities may not be of the same investment quality as those currently identified under Texas law as permissible defeasance securities.

Upon such deposit as described above, such Bonds will no longer be regarded to be outstanding obligations for any purpose, including the application of any limitation on indebtedness. After firm banking and financial arrangements for the discharge and final payment of the Bonds have been made as described above, all rights of the City to initiate proceedings to call the Bonds for redemption or take any other action amending the terms of the Bonds are extinguished; provided, however, that, the City's right to redeem the Bonds defeased to stated maturity is not extinguished if the City has reserved the option, to be exercised at the time of the defeasance of the Bonds, to call for redemption, at an earlier date, those Bonds which have been defeased to their stated maturity date, if the City: (i) in the proceedings providing for the firm banking and financial arrangements, expressly reserves the right to call the Bonds for redemption; (ii) gives notice of the reservation of that right to the owners of the Bonds immediately following the making of the firm banking and financial arrangements; and (iii) directs that notice of the reservation be included in any redemption notices that it authorizes.

BOOK-ENTRY-ONLY SYSTEM

This section describes how ownership of the Bonds is to be transferred and how the principal of, premium, if any, and interest on the Bonds are to be paid to and accredited by DTC while the Bonds are registered in its nominee name. The information in this section concerning DTC and the Book-Entry-Only System has been provided by DTC for use in disclosure documents such as this Official Statement. The City, the Board, the Co-Financial Advisors, and the Underwriters believe the source of such information to be reliable, but take no responsibility for the accuracy or completeness thereof.

The City and the Board cannot and do not give any assurance that (i) DTC will distribute payments of debt service on the Bonds, or redemption or other notices, to DTC Participants, (ii) DTC Participants or others will distribute debt service payments paid to DTC or its nominee (as the registered owner of the Bonds), or redemption or other notices, to the Beneficial Owners, or that they will do so on a timely basis, or (iii) DTC will serve and act in the manner described in this Official Statement. The current rules applicable to DTC are on file with the United States Securities and Exchange Commission, and the current procedures of DTC to be followed in dealing with DTC Participants are on file with DTC.

The Depository Trust Company ("DTC"), New York, New York, will act as securities depository for the Bonds. The Bonds will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee). One fully registered certificate will be issued for each maturity of the Bonds in the aggregate principal amount of each such maturity and will be deposited with DTC.

DTC, the world's largest depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity, corporate and municipal debt issues, and money market instrument (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC, is the holding company of DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a S&P Global Ratings' rating of "AA+". The DTC Rules applicable to its Participants are on file with the United States Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Bond ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transactions, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owners entered into the transaction. Transfers of ownership interest in the Bonds are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in the Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Bonds with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participant to whose account such Bonds are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to DTC. If less than all of the Bonds within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the City as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Payments on the Bonds will be made to DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the City or the Paying Agent/Registrar on payable dates in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as in the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, the Paying Agent/Registrar or the City, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds and principal of and interest on the Bonds to DTC is the responsibility of the City, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners shall be the responsibility of Direct and Indirect Participants.

DTC may discontinue providing its services as depository with respect to the Bonds at any time by giving reasonable notice to the City or the Paying Agent/Registrar. Under such circumstances, in the event that a successor depository is not obtained, Bond certificates are required to be printed and delivered.

The City may decide to discontinue use of the system of book-entry transfers through DTC (or a successor securities depository). In that event, Bond certificates will be printed and delivered.

Use of Certain Terms in Other Sections of this Official Statement. In reading this Official Statement it should be understood that while the Bonds are in the Book-Entry-Only System, references in other sections of this Official Statement to registered owners should be read to include the person for which the Participant acquires an interest in the Bonds, but (i) all rights of ownership must be exercised through DTC and the Book-Entry-Only System, and (ii) except as described above, notices that are to be given to registered owners under the Ordinance will be given only to DTC.

Information concerning DTC and the Book-Entry-Only System has been obtained from DTC and is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation by the City, the Board, the Co-Financial Advisors, or the Underwriters.

Effect of Termination of Book-Entry-Only System. In the event that the Book-Entry-Only System is discontinued by DTC or the use of the Book-Entry-Only System is discontinued by the City, printed certificates representing the Bonds will be issued to the holders and the Bonds will be subject to transfer, exchange, and registration provisions as set forth in the Ordinance and summarized under "THE BONDS - Transfer, Exchange, and Registration" below.

Paying Agent/Registrar

The initial paying agent/registrar is UMB Bank, N.A., Dallas, Texas (the "Paying Agent/Registrar"). In the Ordinance, the City retains the right to replace the Paying Agent/Registrar. The City covenants to maintain and provide a Paying Agent/Registrar at all times until the Bonds are duly paid and any successor Paying Agent/Registrar must be a commercial bank, trust company, financial institution, or other agency organized under the laws of the State and duly qualified and legally authorized to serve as and perform the duties and services of Paying Agent/Registrar for the Bonds. Upon any change in the Paying Agent/Registrar for the Bonds, the City agrees to promptly cause a written notice thereof to be sent to each registered owner of the Bonds by United States mail, first class, postage prepaid, which notice will also give the address of the new Paying Agent/Registrar.

Principal of the Bonds will be payable to the registered owner at maturity or prior redemption upon presentation at the designated payment office of the Paying Agent/Registrar in Dallas, Texas. Interest on the Bonds will be payable by check, dated as of the interest payment date, and mailed by the Paying Agent/Registrar to registered owners as shown on the records of the Paying Agent/Registrar on the Record Date (defined herein) (see "THE BONDS – Record Date for Interest Payment" herein), or by such other method, acceptable to the Paying Agent/Registrar, requested by, and at the risk and expense of, the registered owner. If the date for the payment of the principal of or interest on the Bonds is a Saturday, Sunday, legal holiday, or day on which banking institutions in the city where the Paying Agent/Registrar is located are authorized by law or executive order to close, then the date for such payment will be the next succeeding day which is not such a Saturday, Sunday, legal holiday, or day on which banking institutions are authorized to close, and payment on such date will have the same force and effect as if made on the original date payment was due.

Initially, the Bonds are issued utilizing the Book-Entry-Only System of the DTC. No physical delivery of the Bonds will be made to the Beneficial Owners of the Bonds and the registered owner of the Bonds appearing on the books of the Paying Agent/Registrar will be Cede & Co., the nominee of DTC. The use of the Book-Entry-Only System may affect the method and timing of payment to the Beneficial Owners of the Bonds. (See "THE BONDS - Book-Entry-Only System" above.)

Transfer, Exchange, and Registration

In the event the Book-Entry-Only System should be discontinued, the Bonds may be transferred and exchanged on the registration books of the Paying Agent/Registrar only upon presentation and surrender thereof to the Paying Agent/Registrar and such transfer or exchange shall be without expense or service charge to the registered owner, except for any tax or other governmental charges required to be paid with respect to such registration, exchange, and transfer. Bonds may be assigned by the execution of an assignment form on the respective Bonds or by other instrument of transfer and assignment acceptable to the Paying Agent/Registrar. New Bonds will be delivered by the Paying Agent/Registrar, in lieu of the Bonds being transferred or exchanged, at the corporate trust office of the Paying Agent/Registrar, or sent by United States mail, first class, postage prepaid, to the new registered owner or his designee. To the extent possible, new Bonds issued in an exchange or transfer of Bonds will be delivered to the registered owner or assignee of the registered owner in not more than three business days after the receipt of the Bonds to be canceled, and the written instrument of transfer or request for exchange duly executed by the registered owner or his duly authorized agent, in form satisfactory to the Paying Agent/Registrar. New Bonds registered and delivered in an exchange or transfer will be in any integral multiple of $5,000 for any one maturity and for a like aggregate principal amount as the Bonds surrendered for exchange or transfer. See "THE BONDS – Book-Entry-Only System" herein for a description of the system to be utilized initially in regard to ownership and transferability of the Bonds. Neither the City nor the Paying Agent/Registrar will be required to transfer or exchange any Bond (i) during the period commencing with the close of business or any Record Date and ending with the opening of business on the following principal or interest payment date, or (ii) with respect to any Bond called for redemption, in whole or in part, within 45 days of the date fixed for redemption; provided, however, such limitation of transfer is not applicable to an exchange by the registered owner of the uncalled balance of a Bond.

Record Date for Interest Payment

The record date ("Record Date") for determining the person to whom interest on a Bond is payable on any interest payment date means the close of business on the last business day of the preceding month.

In the event of a non-payment of interest on a scheduled payment date, and for 30 days thereafter, a new record date for such interest payment (a "Special Record Date") will be established by the Paying Agent/Registrar, if and when funds for the payment of such interest have been received from the City. Notice of the Special Record Date and of the scheduled payment date of the past due interest ("Special Payment Date", which must be 15 days after the Special Record Date) will be sent at least five business days prior to the Special Record Date by United States mail, first class postage prepaid, to the address of each holder of a Bond appearing on the registration books of the Paying Agent/Registrar at the close of business on the last business day next preceding the date of mailing of such notice.

Payment Record

The City has never defaulted in payments on its bonded indebtedness.

BONDHOLDERS' REMEDIES

If the City defaults in the payment of principal, interest, or redemption price on the Bonds when due, or if it fails to make payments into any fund or funds created in the Ordinance, or defaults in the observation or performance of any other covenants, conditions, or obligations set forth in the Ordinance, the registered owners may seek a writ of mandamus to compel City officials to carry out their legally imposed duties with respect to the Bonds, if there is no other available remedy at law to compel performance of the Bonds or the Ordinance and the City's obligations are not uncertain or disputed. The issuance of a writ of mandamus is controlled by equitable principles, and rests with the discretion of the court, but may not be arbitrarily refused. There is no acceleration of maturity of the Bonds in the event of default and, consequently, the remedy of mandamus may have to be relied upon from year to year. The Ordinance does not provide for the appointment of a trustee to represent the interest of the bondholders upon any failure of the City to perform in accordance with the terms of such Ordinance, or upon any other condition and accordingly all legal actions to enforce such remedies would have to be undertaken at the initiative of, and be financed by, the registered owners. The Texas Supreme Court ruled in *Tooke v. City of Mexia*, 197 S.W.3d 325 (Tex. 2006) ("Tooke") that a waiver of sovereign immunity in a contractual dispute must be provided for by statute in "clear and unambiguous" language. Chapter 1371, which pertains to the issuance of public securities by issuers such as the City, permits the City to waive sovereign immunity in the proceedings authorizing the issuance of the Bonds. Notwithstanding its reliance upon the provisions of Chapter 1371 in connection with the issuance of the Bonds (as further described under the caption "THE BONDS – Authority for Issuance"), the City has not waived the defense of sovereign immunity with respect thereto. Because it is unclear whether the Texas Legislature has effectively waived the City's sovereign immunity from a suit for money damages outside of Chapter 1371, bondholders may not be able to bring such a suit against the City for breach of the covenants included in the Bonds or the Ordinance.

Furthermore, Tooke, and subsequent jurisprudence, held that a municipality is not immune from suit for torts committed in the performance of its proprietary functions, as it is for torts committed in the performance of its governmental functions (the "Proprietary-Governmental Dichotomy"). Governmental functions are those that are enjoined on a municipality by law and are given by the State as a part of the State's sovereignty, to be exercised by the municipality in the interest of the general public, while proprietary functions are those that a municipality may, in its discretion, perform in the interest of the inhabitants of the municipality.

In *Wasson Interests, Ltd. v. City of Jacksonville*, 489 S.W.3d 427 (Tex. 2016) ("Wasson"), the Texas Supreme Court (the "Court") addressed whether the distinction between governmental and proprietary acts (as found in tort-based causes of action) applies to breach of contract claims against municipalities. The Court analyzed the rationale behind the Proprietary-Governmental Dichotomy to determine that "a city's proprietary functions are not done pursuant to the 'will of the people'" and protecting such municipalities "via the [S]tate's immunity is not an efficient way to ensure efficient allocation of [S]tate resources". While the Court recognized that the distinction between governmental and proprietary functions is not clear, the Wasson opinion held that the Proprietary-Governmental Dichotomy applies in contract-claims context. The Court reviewed Wasson for a second time and issued an opinion on October 5, 2018 clarifying that to determine whether governmental immunity applies to a breach of contract claim, the proper inquiry is whether the municipality was engaged in a governmental or proprietary function when it entered into the contract, not at the time of the alleged breach. Therefore, in regard to municipal contract cases (as in tort claims), it is incumbent on the courts to determine whether a function is proprietary or governmental based upon the statutory guidance and definitions found in the Texas Civil Practice and Remedies Code, determination of which will dictate the availability of the defense of immunity for causes of action arising under such contract.

Notwithstanding the foregoing case law issued by the Court, such sovereign immunity issues have not been adjudicated in relation to bond matters (specifically, in regard to the issuance of municipal debt). Each situation will be prospectively evaluated based on the facts and circumstances surrounding the contract in question to determine if a suit, and subsequently, a judgment, is justiciable against a municipality. If a judgment against the City could be obtained, it could not be enforced by direct levy and execution against the City's property. Furthermore, the City is eligible to seek relief from its creditors under Chapter 9 of the United States Bankruptcy Code ("Chapter 9"). Although Chapter 9 provides for the recognition of a security interest represented by a specifically pledged source of revenues, such provision is subject to judicial construction. Chapter 9 also includes an automatic stay provision that would prohibit, without Bankruptcy Court approval, the prosecution of any other legal action by creditors or bondholders of an entity which has sought protection under Chapter 9. Therefore, should the City avail itself of Chapter 9 protection from creditors, the ability to enforce would be subject to the approval of the Bankruptcy Court (which could require that the action be heard in Bankruptcy Court instead of other federal or state court); and the Bankruptcy Code provides for broad discretionary powers of a Bankruptcy Court in administering any proceeding brought before it. The opinion of Co-Bond Counsel will note that all opinions relative to the enforceability of the Ordinance and the Bonds are qualified with respect to the customary rights of debtors relative to their creditors and principles of equity which permit the exercise of judicial discretion.

SOURCES AND USES OF BOND PROCEEDS

Proceeds from the sale of the Bonds are expected to be expended as follows:

Sources of Funds	
Par Amount of the Bonds	$153,390,000.00
Net Reoffering Premium	38,723,624.45
Total Sources of Funds	$192,113,624.45
Uses of Funds	
Construction Fund Deposit	$191,000,000.00
Underwriters' Discount	555,242.54
Cost of Issuance and Additional Proceeds	558,381.91
Total Uses of Funds	$192,113,624.45

SECURITY FOR THE BONDS

COMBINED SYSTEM

The City has previously authorized the creation of the System, a single, unified water system consisting of the City's then existing waterworks, wastewater, and water reuse systems, together with all future improvements and additions thereto, and all replacements thereof. In addition, the System Ordinance (hereinafter defined) permits the City to incorporate into the System a stormwater system (including all existing drainage facilities) and any other related system to the extent permitted by law. Currently, the City assumes the overall responsibility of the stormwater program. See “THE SAN ANTONIO WATER SYSTEM - Stormwater System” herein. The System will not include (i) any Special Projects which are declared by the City, upon the recommendation of the Board, not to be part of the System and which are financed with obligations payable from sources other than ad valorem taxes, Pledged Revenues, or Net Revenues, or (ii) any water or water-related properties and facilities owned by the City as part of its electric and gas systems.

To accommodate the assumption of the former Bexar Metropolitan Water District (“BexarMet”) waterworks system, the City, by ordinance of the City Council, created a “Special Project”, as authorized by the passage of Senate Bill 341 (“SB 341”) by the 82nd Texas Legislature in 2011 and pursuant to City ordinances authorizing then-outstanding Senior Lien Obligations, where that waterworks system resided from the time of assumption as a segregated component unit of SAWS until the occurrence of operational integration within the System. This Special Project is referred to herein as the “District Special Project” or the “DSP”; the former BexarMet waterworks system assumed by the City and held in the DSP is referred to as the “DSP System.” Following the retirement of all obligations secured by a lien on and pledge of and payable from the revenues of the DSP System, the DSP was dissolved and the DSP System was consolidated into the System.

PLEDGED REVENUES

The Bonds are special obligations of the City which, together with the currently outstanding Previously Issued Junior Lien Obligations, Junior Lien Obligations–No Reserve Fund, and any Additional Junior Lien Obligations hereafter issued (collectively, the “Junior Lien Obligations”), are payable solely from and equally and ratably secured by a lien on and pledge of the Net Revenues of the System that is junior and inferior to the pledge thereof and lien thereon securing the repayment of the Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City (which first lien on Net Revenues is included in the definition of “Pledged Revenues”), along with any other additional revenues, income, receipts, or other resources that are pledged by the City to the payment of the Junior Lien Obligations (but excluding revenues excluded from Gross Revenues). At this time, no such additional revenues, income, receipts, or other resources are so pledged. The term “Net Revenues” means Gross Revenues less Maintenance and Operating Expenses. The term “Gross Revenues” means all revenue with respect to or on account of the operation and ownership of the System (which, since dissolution of the DSP, includes the DSP System), excluding (i) payments received by the Board under the CPS Contract (as defined herein) together with earnings thereon, (ii) income derived from the investment or deposit of money in the Construction Fund and, until the Reserve Fund contains the Required Reserve Amount, money in the Reserve Fund, and (iii) certain other amounts. Maintenance and Operating Expenses means all current expenses of operating and maintaining the System not paid from the proceeds of any Debt, including, for example, the cost of all salaries, labor, and materials; certain expenses of repairs and extensions; the costs of employee benefits; and the costs of purchasing water and wastewater treatment services from other entities, but excluding allowance for depreciation and other items not requiring an outlay of cash, and excluding interest on the Bonds or any other Debt. For a more detailed description of the defined terms referenced above, see “APPENDIX D – SELECTED PROVISIONS OF THE ORDINANCE” herein.

The Bonds do not constitute an indebtedness or general obligation of the City, the State of Texas, or any other entity; the Bonds are not payable from any funds raised or to be raised by taxation; and owners of the Bonds shall never have the right to demand payment thereof from the levy of ad valorem taxes or from any other source not pledged to the payment of the Bonds. No lien has been created on the physical properties of the System to secure payment of the Bonds (see “BONDHOLDERS’ REMEDIES” herein).

FLOW OF FUNDS

The Ordinance provides that the Gross Revenues will be deposited by the Board, upon receipt, into the System Fund and will be pledged and appropriated to the extent required for the following uses and in the order of priority shown:

> FIRST: to the payment of all necessary and reasonable Maintenance and Operating Expenses as defined herein or required by statute, including, but not limited to, Chapter 1502, Texas Government Code, as amended (formerly Texas Revised Civil Statutes Annotated Article 1113, as amended), to be a first charge on and claim against the Gross Revenues, including a two-month reserve amount based upon the budgeted amount of Maintenance and Operating Expenses for the current Fiscal Year, which amount shall be retained in the System Fund.
>
> SECOND: to the payment of the amounts required to be deposited into the special funds and accounts created and established for the payment, security and benefit of the currently outstanding Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City.
>
> THIRD: to the payment of the amounts required to be deposited into the special funds and accounts created and established for the payment, security, and benefit of the currently outstanding Junior Lien Obligations and any Additional Junior Lien Obligations hereafter issued by the City.
>
> FOURTH: to the payment of the amounts that must be deposited in any special funds and accounts created and established for the payment, security and benefit of the currently outstanding Subordinate Lien Obligations and any Additional Subordinate Lien Obligations hereafter issued by the City.
>
> FIFTH: to the payment of the amounts that must be deposited in any special funds and accounts created and established for the payment, security, and benefit of any Inferior Lien Obligations hereafter issued by the City.
>
> SIXTH: to the payment of the amounts to be transferred to the City’s General Fund and into the Renewal and Replacement Fund, in accordance with the applicable provisions of the Ordinance.

For a more detailed description of the funds referenced above, and the Board’s obligations with respect thereto, see “APPENDIX D - SELECTED PROVISIONS OF THE ORDINANCE” herein.

BOND FUND; EXCESS BOND PROCEEDS

For purposes of providing funds to pay the principal of and interest on all Junior Lien Obligations (including the Bonds) as the same become due and payable, the City shall maintain, at the Depository, a separate and special fund or account created and known as the "Bond Fund". The City has covenanted that there shall be deposited from the System Fund into the Bond Fund prior to each principal and interest payment date from the available Pledged Revenues an amount equal to one hundred percent (100%) of the amount required to fully pay the interest on and the principal of the Junior Lien Obligations then falling due and payable, such deposits to pay maturing principal and accrued interest on the Junior Lien Obligations to be made in substantially equal monthly installments on or before the first day of each month, beginning on or before the first day of the month next following the delivery of the Bonds to the Underwriters. No such deposit shall be required if, on the first day of each month, revenues sufficient to pay the maturing principal and interest payments are, and remain on deposit in the Bond Fund. If the Net Revenues in any month are insufficient to make the required payments into the Bond Fund, then the amount of any deficiency in such payment shall be added to the amount otherwise required to be paid into the Bond Fund in the next month.

The required monthly deposits to the Bond Fund for the payment of principal of and interest on the Junior Lien Obligations shall continue to be made as hereinabove described until such time as (i) the total amount on deposit in the Bond Fund is equal to the amount required to fully pay and discharge all Outstanding Junior Lien Obligations (principal and interest) or (ii) the Junior Lien Obligations are no longer Outstanding.

Accrued interest and premium, if any, received from the Underwriters shall be taken into consideration and reduce the amount of the monthly deposits hereinabove required to be deposited into the Bond Fund from the Net Revenues. Additionally, any proceeds of the Bonds, and investment income thereon, not expended for authorized purposes shall be deposited into the Bond Fund and shall be taken into consideration and reduce the amount of monthly deposits required to be deposited into the Bond Fund from the Net Revenues.

PARITY LIEN ORDINANCE AMENDMENT

By ordinance of the City Council adopted on March 8, 2012, the City has amended the respective City ordinances authorizing the issuance of each series of the then-outstanding Previously Issued Junior Lien Obligations. These ordinance amendments permitted the City to issue, under certain circumstances described below, Junior Lien Obligations–No Reserve Fund, which are City obligations payable from and secured by a junior and inferior lien on and pledge of Net Revenues on parity with the lien thereon and pledge thereof securing the Reserve Fund-Secured Junior Lien Obligations (defined below), but that are not additionally benefited by money on deposit in the Reserve Fund.

Prior to the effectiveness of these ordinance amendments, all Additional Junior Lien Obligations were required to be additionally secured by a lien on and pledge of the Reserve Fund. The aforementioned ordinance amendments, which are now effective, allow the City to issue Junior Lien Obligations-No Reserve Fund so long as such Junior Lien Obligations-No Reserve Fund are sold to parties other than the TWDB. The City remains permitted to issue from time to time Reserve Fund-Secured Junior Lien Obligations upon satisfaction of the conditions described below under "SECURITY FOR THE BONDS – Reserve Fund" (in addition to the other prerequisites to the issuance of Additional Junior Lien Obligations described herein under "THE BONDS – Additional Obligations").

The necessary amendments to City ordinances to permit the issuance of Junior Lien Obligations–No Reserve Fund were consented to by each bond insurer and surety fund provider for each series of then-outstanding Previously Issued Junior Lien Obligations, as well as the TWDB (being the sole owner or consent right holder with respect to this matter for each series of then-outstanding Previously Issued Junior Lien Obligations).

As used herein, "Junior Lien Obligations–No Reserve Fund" means the City's (i) Water System Junior Lien Revenue Refunding Bonds, Series 2012 (No Reserve Fund), (ii) Water System Junior Lien Revenue Refunding Bonds, Series 2013B (No Reserve Fund), (iii) Water System Junior Lien Revenue and Refunding Bonds, Series 2013E (No Reserve Fund), (iv) Water System Variable Rate Junior Lien Revenue and Refunding Bonds, Series 2013F (No Reserve Fund), (v) Water System Junior Lien Revenue and Refunding Bonds, Series 2014A (No Reserve Fund), (vi) Water System Variable Rate Junior Lien Revenue and Refunding Bonds, Series 2014B (No Reserve Fund), (vii) Water System Junior Lien Revenue and Refunding Bonds, Series 2015B (No Reserve Fund), (viii) Water System Junior Lien Revenue Refunding Bonds, Series 2016A (No Reserve Fund), (ix) Water System Junior Lien Revenue Refunding Bonds, Taxable Series 2016B (No Reserve Fund), (x) Water System Junior Lien Revenue and Refunding Bonds, Series 2016C (No Reserve Fund), (xi) Water System Junior Lien Revenue Refunding Bonds, Series 2017A (No Reserve Fund), (xii) Water System Junior Lien Revenue and Refunding Bonds, Series 2018A (No Reserve Fund), (xiii) Water System Variable Rate Junior Lien Revenue Bonds, Series 2019A (No Reserve Fund), (xiv) Water System Junior Lien Revenue Refunding Bonds, Series 2019C (No Reserve Fund), (xv) Water System Junior Lien Revenue and Refunding Bonds, Series 2020A (No Reserve Fund), (xvi) upon issuance, the Bonds, and (xvii) any Additional Junior Lien Obligations hereafter issued that are not additionally benefited by money on deposit in the Reserve Fund; the term "Reserve Fund-Secured Junior Lien Obligations" means the Previously Issued Junior Lien Obligations and any Additional Junior Lien Obligations that are secured by a parity lien on and pledge of the Reserve Fund and specifically excluding the Junior Lien Obligations–No Reserve Fund.

RESERVE FUND

The City ordinances authorizing the respective issuance of the Previously Issued Junior Lien Obligations require the Board to accumulate and maintain a reserve for the payment of the currently outstanding Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations (the "Required Reserve Amount") equal to the Average Annual Debt Service Requirements (calculated on a Fiscal Year basis and determined as of the date of issuance of the most recently issued series of Additional Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations) of the Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations. To comply with this requirement, the City has heretofore created and established and now maintains, a separate and special fund or account known as the "City of San Antonio, Waterworks and Sewer System Junior Lien Revenue Bond Reserve Fund" (the "Reserve Fund"), which fund or account is maintained at the Depository. All funds deposited into the Reserve Fund (excluding earnings and income derived or received from deposits or investments which will be transferred to the System Fund during such period as there is on deposit in the Reserve Fund the Required Reserve Amount) shall be used solely for the payment of the principal of and interest on the currently outstanding Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations when and to the extent other funds available for such purposes are insufficient, and, in addition, may be used to retire the last stated maturity or interest on any Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations. As of the date of issuance of the Bonds, the Reserve Fund is fully funded with a combination of cash, investments, and reserve fund surety policies issued by qualified providers. The Reserve Fund does not additionally secure the Bonds.

Except as hereinafter described, as and when Additional Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations are delivered and incurred, the Required Reserve Amount shall be increased, if required, to an amount calculated in the manner provided in the City ordinances authorizing the respective issuance of the Previously Issued Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations. Any additional amount required to be maintained in the Reserve Fund shall be so accumulated by the deposit of the necessary amount of the proceeds of the issue or other lawfully available funds in the Reserve Fund immediately after the delivery of the issue of the then proposed Additional Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations, or, at the option of the City, by the deposit of monthly installments, made on or before the tenth day of each month following the month of delivery of the then proposed Additional Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations, of not less than 1/60th of the additional amount to be maintained in the Reserve Fund by reason of the issuance of the Additional Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations then being issued (or 1/60th of the balance of the additional amount not deposited immediately in cash), thereby ensuring the accumulation of the appropriate Required Reserve Amount.

When and so long as the cash and investments in the Reserve Fund equal the Required Reserve Amount, no deposits need be made to the credit of the Reserve Fund; but, if and when the Reserve Fund at any time contains less than the Required Reserve Amount other than as the result of the issuance of Additional Junior Lien Obligations that are Reserve Fund-Secured Junior Lien Obligations as described in the preceding paragraph), the City has covenanted and agreed to cure the deficiency in the Required Reserve Amount by resuming the Required Reserve Fund Deposits to said Fund or account from the Net Revenues of the System, or any other lawfully available funds, such monthly deposits to be in amounts equal to not less than 1/60th of the Required Reserve Amount covenanted by the City to be maintained in the Reserve Fund with any such deficiency payments being made on or before the tenth day of each month until the Required Reserve Amount has been fully restored. The City has further covenanted and agreed that, subject only to the prior payments to be made to the Bond Fund relating to the Junior Lien Obligations and as required by the ordinances authorizing the issuance of the currently outstanding Senior Lien Obligations or any Additional Senior Lien Obligations hereafter issued by the City, the Net Revenues shall be applied and appropriated and used to establish and maintain the Required Reserve Amount and to cure any deficiency in such amounts as required by the terms of the ordinances authorizing the respective issuance of Previously Issued Junior Lien Obligations that are Reserve Fund–Secured Junior Lien Obligations and any other ordinance pertaining to the issuance of any Additional Junior Lien Obligations that are Reserve Fund–Secured Junior Lien Obligations.

During such time as the Reserve Fund contains the Required Reserve Amount, the City may, at its option, withdraw all surplus funds in the Reserve Fund in excess of the Required Reserve Amount and deposit such surplus in the System Fund; provided, however, to the extent that such excess amount represents bond proceeds, then such amounts must be transferred to the Bond Fund.

See "THE BONDS – Security and Source of Payment" and "SELECTED PROVISIONS OF THE ORDINANCE – Reserve Fund" in APPENDIX D herein.

PAYMENTS TO GENERAL FUND OF THE CITY

General. Pursuant to the Ordinance, the Board is required to transfer to the General Fund of the City, no later than the last business day of each month, an amount of money calculated not to exceed 5% (or such lesser amount as may be determined from time to time by the City Council) of the Gross Revenues (after payment of all Maintenance and Operating Expenses and debt service requirements on any outstanding Debt) for the preceding month to be utilized by the City in the manner permitted by the provisions of Chapter 1502, Texas Government Code, as amended. The amount so transferred shall be net of all amounts owed by the City to the Board for use of the System's services and facilities by the City and its instrumentalities. The amounts payable to the General Fund of the City are required to be paid *pari passu* with deposits to the Renewal and Replacement Fund. (See "SECURITY FOR THE BONDS – Renewal and Replacement Fund" below.)

To the extent that the available Net Revenues in any month are insufficient for the Board to make all or part of the transfer otherwise required to be made to the General Fund of the City, the Board is required to make up such shortfall (i) in the next month in which available Net Revenues exceed the amounts otherwise required to be transferred to the General Fund of the City and the *pari passu* payment to the Renewal and Replacement Fund, or (ii) to the extent such shortfall has not been made up by the last month of the Fiscal Year, solely from any surplus funds deposited into the Renewal and Replacement Fund during such Fiscal Year. The Board's obligation to make up any shortfall in a Fiscal Year does not carry over to a subsequent Fiscal Year.

Effective with the City's 2020 Fiscal Budget (October 1, 2019), the transfer to the City increased from 2.7% to 4.0% of Gross Revenues. SAWS' evaluation of this increase has determined that it will not materially impact the System's current financial position or its operations. The SAWS 2020 budget includes a transfer of $31,700,000 to the City. As of June 30, 2020, SAWS had recognized total transfers to the City of approximately $14.2 million.

See "APPENDIX D - SELECTED PROVISIONS OF THE ORDINANCE – Payments to City General Fund" herein.

RENEWAL AND REPLACEMENT FUND

The Renewal and Replacement Fund has been established and confirmed under the Ordinance for the purpose of (i) paying the costs of improvements, enlargements, extensions, additions, replacements or other capital expenditures related to the System, (ii) paying the costs of unexpected or extraordinary repairs or replacements of the System for which System funds are not available, (iii) paying unexpected or extraordinary expenses of operation and maintenance of the System for which System funds are not otherwise available, (iv) depositing any funds received by the City pursuant to the contract with CPS Energy, the City owned electricity and gas utility, for the provision of recycled water (the

"CPS Contract"), and such funds, including any interest or income thereon, are required to be maintained in a separate, segregated account of the Renewal and Replacement Fund and may only be used to pay Maintenance and Operating Expenses of the System's water reuse facilities or the debt service requirements on any obligations incurred as permitted by the CPS Contract and in no event may any such amount, including interest and income thereon, be transferred to the General Fund of the City, except as permitted by the CPS Contract, (v) paying bonds or other obligations of the System for which other System revenues are not available, (vi) in the last month of any Fiscal Year to make up any shortfall in the required payments to the General Fund of the City, or (vii) for any other lawful purpose in support of the System.

Deposits to the Renewal and Replacement Fund are required to be *pari passu* with the gross amount payable to the General Fund of the City (prior to the deduction of any charges for water utility services provided by the System to the City) until the full amount payable to the City has been paid. That is, such deposits to the Renewal and Replacement Fund are to be made equally and ratably, without preference, and on a dollar-for-dollar basis with the gross amount payable to the General Fund of the City, prior to the deduction of any charges for services, until the full amount to be paid to the General Fund of the City in a Fiscal Year has been paid. Thereafter all surplus Net Revenues are to be deposited to the Renewal and Replacement Fund. See "APPENDIX D - SELECTED PROVISIONS OF THE ORDINANCE – Renewal and Replacement Fund" herein.

RATE COVENANT

The City has agreed, while any of the Senior Lien Obligations and Junior Lien Obligations are outstanding, to establish and maintain rates and charges for facilities and services afforded by the System that are reasonably expected, on the basis of available information and experience and with due allowance for contingencies, to produce Gross Revenues in each Fiscal Year sufficient:

(a) to pay Maintenance and Operating Expenses;

(b) to produce Pledged Revenues sufficient to pay (i) 1.25 times the Annual Debt Service Requirements for such Fiscal Year on the Senior Lien Obligations, and (ii) the amounts required to be deposited in any reserve or contingency fund created for the payment and security of the Senior Lien Obligations and any other obligations or evidences of indebtedness issued or incurred that are payable from and equally and ratably secured solely by a first lien on and pledge of the Pledged Revenues;

(c) to produce Net Revenues, together with any other lawfully available funds (including the proceeds of Debt which the City expects will be utilized to pay all or part of the principal and interest on any obligations described in this subparagraph), sufficient to pay the principal of and interest on the currently outstanding Junior Lien Obligations and the Subordinate Lien Obligations or any Additional Junior Lien Obligations, Additional Subordinate Lien Obligations, and/or Inferior Lien Obligations hereafter issued by the City and the amounts required to be deposited in any special fund created for the payment and security of any such obligations, and any other obligations payable from and secured by a junior, subordinate or inferior lien on and pledge of the Net Revenues;

(d) to produce Net Revenues, together with any other lawfully available funds, to make the required transfers to the General Fund of the City as described in the Ordinance; and

(e) to pay any other Debt payable from the Net Revenues or secured by a lien on revenues of the System.

See "SAWS STATISTICAL SECTION AND MANAGEMENT DISCUSSION – Monthly, Water, Sewer, and Water Supply Fee Rates" and "APPENDIX D - SELECTED PROVISIONS OF THE ORDINANCE – Rates and Charges" herein.

REFUNDABLE TAX CREDIT BONDS

The refundable tax credits to be received by the City in connection with any obligations secured by System revenues that are designated as obligations entitling the City to the receipt of refundable tax credits from the United States Department of the Treasury under the Internal Revenue Code of 1986, as amended (the "Code") (including, but not limited, to obligations designated as "build America bonds" and "qualified bonds" under the Code), will be considered as an offset to debt service on those obligations to which the credit relates for the purpose of satisfying any debt service coverage requirements under the Ordinance, including satisfaction of any rate covenant, reserve fund requirement, or prerequisite to the issuance of additional indebtedness at any lien level.

The City has determined that the reduced amount of refundable tax credit payments to be received from the United States Treasury in relation to its outstanding obligations designated as "build America bonds" or "qualified bonds" under the Code as a result of the automatic reductions in federal spending effective March 1, 2013 pursuant to the Budget Control Act of 2011 (commonly referred to as "Sequestration"), and extensions thereof pursuant to the Bipartisan Budget Act of 2013, will not have a material impact on the financial condition of the City or its ability to pay regularly scheduled debt service on its outstanding obligations when and in the amounts due and owing. See Footnote (2) to the table appearing under "DEBT AND OTHER FINANCIAL INFORMATION – Combined System Revenue Debt Service Requirements" herein.

Under current law, Sequestration is scheduled to continue through September 2029. Assuming Congress does not repeal the sequester, the percentage reduction that will be applied to payments of issuers of direct-pay bonds for Federal Fiscal Year 2020 is 5.9 percent and is anticipated to be 5.7 percent for Federal Fiscal Year 2021. Additionally, on June 22, 2020, the Internal Revenue Service ("IRS") issued a notice that due to the suspension or limitation of operations related to the Pandemic, the processing of returns for credit payments to issuers of qualified bonds, including requested payments, were being delayed. See "EFFECT OF SEQUESTRATION AND IRS OPERATIONS DURING THE PANDEMIC" herein. In June 2019, the City defeased certain maturities of its outstanding Water System Revenue Bonds, Taxable Series 2009B (Direct Subsidy - Build America Bonds) (the "2009B Bonds"), and in October 2019, the City refunded its Water System Revenue Bonds, Taxable Series 2010B (Direct Subsidy - Build America Bonds) (the "2010B Bonds", and together with the 2009B Bonds, the "Tax Credit Bonds"). As a result of the foregoing actions, the City's exposure to any Sequestration risk or any delays in processing by the IRS has been significantly reduced due to the limited remaining principal amount of the Tax Credit Bonds.

COMMERCIAL PAPER NOTE PROGRAM

The City Council has authorized a Tax-Exempt Commercial Paper Program for the System (the "TECP") in the amount of $500,000,000, to be issued from time to time as the City of San Antonio, Texas Water System Commercial Paper Notes, Subseries A-1 (the "Subseries A-1 Notes"), City of San Antonio, Texas Water System Commercial Paper Notes, Subseries A-2 (the "Subseries A-2 Notes", and collectively with the Subseries A-1 Notes, the "Series A Notes"), City of San Antonio, Texas Water System Commercial Paper Notes, Series B (the "Series B Notes"), and City of San Antonio, Texas Water System Commercial Paper Notes, Series C (the "Series C Notes"). The purpose of the TECP is to provide funds for the interim financing of a portion of the costs of capital improvements to the System. Scheduled maturities of the short-term borrowing under the TECP may not extend past September 13, 2058. The TECP is supported by two separate revolving credit agreements, the first with JPMorgan Chase Bank, National Association ("JPMorgan"), which expires in accordance with its terms on October 4, 2023 (the "Subseries A-1 Credit Agreement"). The second revolving credit agreement is with Wells Fargo Bank, N.A. ("Wells Fargo"), which expires in accordance with its terms on January 8, 2021 (the "Series C Credit Agreement"). Capacity under the Series C Credit Agreement is currently fully consumed by a direct placement note with Wells Fargo with a maturity date of January 8, 2021. The TECP is also supported by a note purchase agreement directly placed with JPMorgan (the "Subseries A-2 Purchase Agreement" and together with the Subseries A-1 Credit Agreement and the Series C Credit Agreement, the "Credit Agreements"), the term of which runs concurrently with the Subseries A-1 Credit Agreement, and the Subseries A-2 Notes are not currently eligible to be publicly marketed and sold. The City initially issued, and the City is required to maintain outstanding for the duration of the term of the Subseries A-2 Purchase Agreement, $2,000,000 in Subseries A-2 Notes.

Liquidity support for the TECP's entire $500,000,000 authorization is currently in place with JPMorgan supporting the Series A Notes in the amount of $400,000,000 (although the Subseries A-2 Purchase Agreement requires $2,000,000 remain outstanding thereunder, thus reducing the available support to $398,000,000), and Wells Fargo supports the Series C Notes in the amount of $100,000,000.

On April 15, 2020, the revolving credit agreement with Wells Fargo previously supporting the Series B Notes was amended to allow for a direct placement of the Series C Notes with Wells Fargo in the amount of $100,000,000 with a maturity date of January 8, 2021 and to amend the expiration date of the agreement to January 8, 2021.

As of the date of this Official Statement, $218,260,000 in Commercial Paper Notes are outstanding, comprised of $116,260,000 in Subseries A-1 Notes, $2,000,000 in Subseries A-2 Notes, and $100,000,000 in Series C Notes. Any advances for payment of the Commercial Paper Notes under the Credit Agreements are secured by a lien and pledge of the Net Revenues of the System subordinate to the Senior Lien Obligations, and the Junior Lien Obligations (including the Bonds), and on a parity with the Commercial Paper Notes (which are the only Subordinate Lien Obligations currently outstanding), and the System's obligations under the interest rate hedge transaction described herein. (See "THE SAN ANTONIO WATER SYSTEM – Interest Rate Hedge Transaction" herein).

THE SAN ANTONIO WATER SYSTEM

HISTORY AND MANAGEMENT

On February 13, 1992, the City Council determined that it was in the best interest of the citizens of the City and the customers served by the water and wastewater systems to consolidate all water related systems, functions, agencies and activities into one agency. This action was taken due to the myriad of issues confronting the City related to the development and protection of its water resources. The consolidation provided the City a singular voice of representation when promoting or defending the City's goals and objectives for water resource protection, planning and development when dealing with local, regional, state, and federal water authorities and officials.

Final City Council approval for the consolidation was given on April 30, 1992 with the approval of Ordinance No. 75686 (the "System Ordinance"). The System Ordinance approved the creation of the System, a single unified system consisting of the City's existing waterworks (formerly the City Water Board), wastewater and water reuse systems (formerly departments of the City), together with all future improvements and additions thereto, and all replacements thereof. In addition, the System Ordinance authorizes the City to incorporate into the System a stormwater system and any other related system to the extent permitted by law.

Simultaneously with the creation of the System, the City sold its $635,925,000 City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 1992 for the purpose of (i) enabling the City to consolidate its waterworks, wastewater and water reuse systems, and (ii) refunding all outstanding obligations of the City issued to finance improvements to and extensions of its waterworks, wastewater and water reuse systems; and refunding certain other outstanding obligations relating to the City's waterworks, wastewater and water reuse systems, which are secured by and payable from a pledge of revenues derived from, the City's waterworks, wastewater and water reuse systems, respectively. The City believes that refunding the obligations and establishing the System in 1992 has allowed the City greater flexibility in meeting future financing requirements. More importantly, it has allowed the City to develop, implement, and plan for its water needs through a single agency.

The System provides water and wastewater service to the majority of the population within the corporate limits of the City and Bexar County. The System employs approximately 1,700 personnel and maintains over 12,600 miles of water and sewer mains.

The complete management and control of the System is vested in the Board, which initially had five members. Subsequent legislation authorized expansion to a board consisting of seven members. The Board consists of the Mayor of San Antonio (as an ex-officio Board member) and up to six persons who are residents of the City or reside within the area serviced by the System. With the exception of the Mayor, all other Board members are appointed by the City Council for four-year, staggered terms, and are eligible for reappointment for one additional four-year term. Four Board members must be appointed from four different quadrants in the City and two Board members are appointed from the north and south sides of the City. Notwithstanding the foregoing, the membership on the Board may be increased to an amount greater than seven, to include the Mayor of the City as an ex-officio member, as otherwise appointed by the City Council.

Attached hereto as APPENDIX B is an excerpt of SAWS' Comprehensive Annual Financial Report for the fiscal year ended December 31, 2019 which provides the System's recent audited operating results and is available through SAWS' website at www.saws.org. See "APPENDIX B – EXCERPTS FROM THE SAN ANTONIO WATER SYSTEM COMPREHENSIVE ANNUAL FINANCIAL REPORT". Attached hereto as APPENDIX C are the System's most recent unaudited operating results. See "APPENDIX C – UNAUDITED FINANCIAL STATEMENTS (THROUGH JUNE 30, 2020)".

The present members of the Board are:

Board	Length of Service	Term Expires	Occupation
Heriberto Guerra Chair	8 Years, 10 Months	May 31, 2018[(1)]	Chairman and CEO Avanzar Interior Technologies
Patricia Jasso Vice Chair	6 Years, 9 Months	May 31, 2020[(1)]	Retired
Amy Hardberger Secretary	2 Years, 3 Months	May 31, 2021	Associate Dean/Law Professor St. Mary's University
Patricia E. Merritt Assistant Secretary	6 Years, 9 Months	May 31, 2018[(1)]	Retired
David McGee Trustee	5 Years, 10 Months	May 31, 2021	President/CEO of San Antonio Region Amegy Bank of Texas
Eduardo Parra Trustee	2 Years, 3 Months	May 31, 2021	CEO – Principal Engineer Parra & Co., LLC
Ron Nirenberg, Mayor and Ex-Officio Member	3 Years, 0 Months	May 31, 2021	Broadcast General Manager

(1) Position to remain occupied by current member until either reappointed or a new member is appointed by City Council. Applications for appointment to the SAWS Board of Trustees are currently being accepted by City Council, with appointments expected to be finalized in August of 2020.

Except as provided in the System Ordinance, the Board has absolute and complete authority and power to control, manage, and operate the System and controls the expenditure and application of the Gross Revenues of the System and in connection therewith is vested with all of the powers of the City with respect thereto, including all powers necessary or appropriate for the performance of all covenants, undertakings, and agreements of the City contained in the System Ordinance, and with the exception of fixing rates and charges for services rendered by the System and other matters hereinafter described, the Board has full power and authority to make rules and regulations governing the furnishing of services of the System to customers for the payment of the same, and for the discontinuance of such services upon the failure of customers to pay for the services.

The Board, to the extent authorized by law, has authority to make extensions, improvements, and additions to the System and to acquire by purchase or otherwise properties of every kind in connection therewith.

EXCEPTIONS

As noted, under the System Ordinance, only the City Council can fix rates and charges for service rendered by the System. Similarly, State law provides that only the City Council can authorize the sale of revenue bonds or other securities, exercise the use of condemnation for the acquisition of real property, and select and appoint members of the Board. Additionally, Ordinance No. 74050 adopted on August 1, 1991, provides that the disposition of real property by the System requires some degree of oversight by the City.

The general operations of the System are under the supervision of the President/Chief Executive Officer who is employed by the Board. The Board shall appoint and employ all other officers, employees, and professional consultants, which it may deem desirable.

ADVISORY COMMITTEES

There are three ongoing advisory committees which provide comment and report to the Board and the System staff on System projects and activities: the Citizens Advisory Panel ("CAP"), the Community Conservation Committee ("CCC"), and the Capital Improvements Advisory Committee ("CIAC"). Members for each of these committees are sought to represent diverse interests from the System's service area. In addition to these ongoing advisory committees, the Rate Advisory Committee ("RAC") is a special purpose committee that was implemented in 2019. Similar to the other committees, the membership of RAC is designed to represent diverse viewpoints from the System's service area.

Citizen Advisory Panel ("CAP"). The CAP was established in 1998 to provide System staff and the Board with indications of the acceptability of water resource projects, policies, and programs. The CAP's charge is to support the development of the System's 50-year water resource plan; review the application of evaluative criteria for the plan; identify concerns raised under these criteria; and to suggest ways for adjusting the System's programs to meet these concerns.

CAP meetings are held monthly and are open to the public. CAP members are actively engaged in the process to develop new water supplies for the City and Bexar County region.

Community Conservation Committee ("CCC"). The CCC was organized in 1996 to provide input to System staff and the Board on conservation issues. The CCC is the cornerstone of the System's public involvement in conservation and drought management efforts.

The CCC provides input on program development, program performance, and new program ideas. Some of its work is accomplished through focus groups that enlist community experts to address specific issues – residential, commercial, institutional, and industrial. Over the last several years, the CCC's major accomplishments included the development of a pilot program to evaluate and reduce water use among the System's top commercial and residential users and assistance in the development of better marketing methods to inform the community about conservation programs. The CCC has also been instrumental in providing input as the System's conservation focus shifted to a primarily outdoor paradigm.

Capital Improvements Advisory Committee ("CIAC"). The CIAC advises the City Council on impact fees and was first formed in 1987. The 11-member committee is appointed by City Council (one from each City Council district and one member appointed by the Mayor to represent the City's extraterritorial jurisdiction), with representation from the real estate and development industry and the general community.

Impact fees are one-time fees charged to developers for new development to pay for general benefit facilities such as treatment plants, tanks, wells, water supply projects, and large transmission mains and outfall mains. Collecting adequate impact fees helps fund construction of infrastructure needed to support growth with minimum impact on existing ratepayers. The impact fees are required to be updated at least every 5 years, with the most recent update approved May 16, 2019. (See "SAWS STATISTICAL SECTION AND MANAGEMENT DISCUSSION - Impact Fees" herein.)

Rates Advisory Committee ("RAC"). SAWS has begun a comprehensive rates, fees and charges study (the "Rate Design Study"). The purpose of the Rate Design Study is to provide SAWS with information regarding the rate structure for water delivery, water resource development, recycled water, and wastewater. The RAC, comprised of a cross-section of SAWS customers, will be asked to provide input to the Board on the Rate Design Study. Among the various rate issues to be addressed, the Rate Design Study will evaluate the differential between inside city limit rates and outside city limit rates; the basis for residential wastewater charges (winter average versus water consumption); affordability considerations; and industry practices. The RAC met a total of eight times from September 2019 to February 2020. During these meetings, the RAC prioritized pricing objectives, reviewed usage characteristics and cost allocation methodologies, and approved the cost of service by customer class recommendations. As a result of the COVID-19 pandemic, the RAC has been indefinitely suspended since March. SAWS continues to monitor the situation with the hope of restarting the process in late 2020 or early 2021. Based on the delay which has been experienced, any rate design changes which may be recommended as a result of this process and potentially approved by both SAWS Board and City Council would likely not take effect until at least January 2022.

ADMINISTRATION AND OPERATING PERSONNEL

The President/Chief Executive Officer of SAWS is Robert R. Puente. Prior to joining SAWS in May 2008, Mr. Puente served in the Texas House of Representatives where he was Chair of the House Natural Resources Committee and served on the House Local Ways and Means Committee. Mr. Puente was first elected to the Texas House of Representatives in 1991. Mr. Puente also received his Doctor of Jurisprudence from The University of Texas School of Law in 1982, and practiced law as a private attorney and managed his own firm from 1983 to 2008.

The Senior Vice President/Chief Operating Officer is Steven M. Clouse. Mr. Clouse retired from SAWS as Senior Vice President/Chief Operating Officer effective December 31, 2018 after more than 30 years of service. Mr. Clouse worked in several departments and served in many capacities prior to his retirement. Mr. Clouse returned to SAWS effective December 2, 2019 as the Senior Vice President of Engineering and Construction and transitioned to Senior Vice President/Chief Operating Officer in February 2020. Prior to the System's inception in 1992, he worked for the Environmental Management Department of the City.

The Senior Vice President/Chief Financial Officer is Douglas P. Evanson. Mr. Evanson joined SAWS in April of 2005. Prior to joining SAWS, Mr. Evanson was the Assistant Treasurer at Black & Veatch. Before that, he was the Chief Financial Officer for United Energy and Multinet Gas, electricity and natural gas distribution companies located in Melbourne, Australia.

The Vice President and General Counsel is Nancy Belinsky. Ms. Belinsky joined the System in 2003. Prior to joining SAWS, Ms. Belinsky practiced commercial real estate law with the law firm of Akin Gump Strauss Hauer and Feld LLP. Ms. Belinsky received her Doctor of Jurisprudence from St. Mary's University School of Law.

The Vice President of Human Resources is Sharon De La Garza. Ms. De La Garza joined the System in 2012. Prior to joining SAWS, Ms. De La Garza was Assistant City Manager for the City of San Antonio, having spent a total of ten years with the City. Ms. De La Garza also served as the Assistant Human Resources Director and Human Resource Director for the City of Dallas, Texas from 1999 to 2004.

The Vice President of Water Resources & Governmental Relations is Donovan Burton. Mr. Burton joined SAWS in November of 2006. Prior to joining SAWS, he worked for 10 years for a local State Representative in Austin, heading up a legislative office and a committee with primary jurisdiction over military and homeland security issues. Mr. Burton also served in the U.S. Navy for four years from 1989-1993.

The Vice President of Communications & External Affairs is Gavino Ramos. Mr. Ramos joined the System in early 2015. Prior to joining the System, Mr. Ramos served as Director of Corporate Communications for the Leonard Holding Company. Mr. Ramos also serves as the Vice Chairman of the Alamo Regional Mobility Authority.

Name	Position	Length of Service with System	Total Government Service
Robert R. Puente	President/Chief Executive Officer	12 Years, 2 Months	29 Years, 6 Months
Steven M. Clouse	Senior Vice President/Chief Operating Officer	29 Years, 11 Months	31 Years, 8 Months
Douglas P. Evanson	Senior Vice President/Chief Financial Officer	15 Years, 2 Months	15 Years, 2 Months
Nancy Belinsky	Vice President and General Counsel	17 Years, 2 Months	17 Years, 2 Months
Sharon De La Garza	Vice President - Human Resources	8 Years, 3 Months	24 Years, 3 Months
Donovan Burton	Vice President – Water Resources & Governmental Relations	13 Years, 7 Months	27 Years, 11 Months
Gavino Ramos	Vice President – Communications & External Affairs	5 Years, 2 Months	5 Years, 4 Months

SYSTEM STRUCTURE

The System is structured to strategically position functions to maximize efficiencies and responsiveness to System customers. Six groups report to the President/CEO, which include the Senior Vice President/COO, Senior Vice President/CFO, Vice President and General Counsel, Vice President – Human Resources, Vice President – Water Resources & Governmental Relations, and Vice President – Communications & External Affairs.

The Internal Audit Department, which is responsible for financial and operational audits of System departments, divisions, activities, and programs, reports functionally to the Board and administratively to the President/CEO.

President/Chief Executive Officer. The President/CEO is responsible and accountable for leading and managing the System, including the implementation of the policy goals set by the Board of Trustees and City Council. The President/CEO sets the vision and works alongside employees to achieve SAWS' mission and goals.

Senior Vice President/Chief Operating Officer. The Senior Vice President/Chief Operating Officer is responsible for the day-to-day operations of the System. The following groups report directly to the Chief Operating Officer:

PRODUCTION AND TREATMENT

The Production and Treatment group provides the essential function of managing the 24-hour-a-day operation of the Waterworks System and Wastewater System (each as defined herein). The group is responsible for the production and distribution of potable water; the treatment of wastewater for distribution in the recycle system or discharge; the processing of wastewater biosolids for ultimate disposal; the distribution of recycled water for reuse purposes; management of the City-wide odor control program; acquisition and maintenance of fleet vehicles and equipment; management and maintenance of facilities; centralized chilled water operations; and security of facilities and personnel. The group consists of the following departments:

- Production – Manages the production of potable water across the System's service area. Operates the Systems' potable water facilities, recycle water distribution, and the H_2Oaks Facility operation. Also manages the Production Mechanical Maintenance unit and associated instrumentation and controls. This group will support the operation of the new Agua Vista Station, which will receive and treat Vista Ridge water for transmission into the SAWS distribution system;
- Treatment Operations Management – Oversees all the operations of the three water recycling centers of the System as well as manages all the biosolids to ensure proper recycling or disposal in compliance with State and federal regulations. Manages the Wastehauler program and odor control program. Operates the recycle water system outfalls and manages environmental flows to the river;
- Security – Manages a proactive security program and associated support contracts for the System facilities;
- Treatment Maintenance Management – Manages centralized mechanical and electrical maintenance across all the System's production, treatment, and lift station facilities to include the H_2Oaks Facility. The department also maintains the recycled water system outfalls and special project construction and repairs across the System; and
- Predictive Maintenance – Manages and plans maintenance functions within the Production and Treatment group, as well as performs analysis to reduce critical infrastructure failures and ultimately improve systems.

DISTRIBUTION AND COLLECTION OPERATIONS

The Distribution and Collection Operations group operates, maintains, and repairs the water distribution and wastewater collection systems ensuring the System's customers receive uninterrupted, quality potable water and associated wastewater services. This is accomplished by providing:

- Construction & Maintenance – Repairs and proactively maintains the wastewater collection system, including line cleaning and televising to verify sewer infrastructure condition and pinpoint defects. Performs flowable fill backfills and concrete/asphalt restoration following pipeline repairs. Water Loss & Recovery oversees all meter repair resources and the proactive leak detection, valve assessment, and fire hydrant maintenance programs. Operations Support provides administrative support to departments within the group, including invoice processing, data management, service contract management, materials acquisition and notification services for maintenance crews. Operations Support also performs emergency and routine field investigations including utility locate services; and
- Operation Centers – SAWS utility crews are mobilized from five strategically located operations centers throughout the City: Northeast, East Side, North Side, West Side, and Steven M. Clouse Water Recycling Center (formerly Dos Rios) on the South Side. SAWS operations centers are staffed with the necessary resources to properly repair and maintain underground water, wastewater, recycled water, and chilled water infrastructure throughout the SAWS service area.

ENGINEERING AND CONSTRUCTION

The Engineering and Construction group coordinates the development and execution of the System's annual Capital Improvements Program ("CIP"; see "DEBT AND OTHER FINANCIAL INFORMATION – Capital Improvement Program" herein). The group performs engineering analysis of existing facilities and plans new infrastructure to meet the increasing water and wastewater demands of the growing community. The group also designs and manages the construction of new and replacement water and wastewater infrastructure. The Engineering and Construction group is further broken down into the following departments:

- Pipelines – Plans and coordinates design activities and manages construction for new and rehabilitated water distribution system and wastewater collection system projects;
- Construction – Inspects pipeline construction projects for water and sewer and water supply projects;
- Development – Manages impact fee program, develops water and wastewater master plans, coordinates infrastructure necessary for new development, and provides engineering support to Distribution and Collection Operations and Production and Treatment Operations;
- Plants and Major Projects – Plans, coordinates design activities and manages construction for water supply integration projects, new water supply development, potable and recycled water production facilities, and wastewater treatment plants; and
- Central Water Integration Pipeline – Manages the design and construction of system improvements necessary to integrate effectively water from the Vista Ridge Pipeline into SAWS' existing System.

FLEET & FACILITIES MAINTENANCE

Fleet & Facilities Maintenance provides comprehensive maintenance services for vehicles and equipment. The Fleet Department manages vehicle replacement and disposal. Facilities Maintenance provides building maintenance and management services at SAWS facilities. Additionally, Fleet & Facilities manages the Chilled Water plants serving customers downtown and at Port San Antonio. Fleet & Facilities also oversees the Office of Energy Management which manages the process for electric/gas services metering, bill review and payment for SAWS activities

Senior Vice President/Chief Financial Officer. The Senior Vice President/Chief Financial Officer ("CFO") is responsible for the overall financial management of the System. The following groups report directly to the CFO:

FINANCIAL SERVICES

The Financial Services Group is headed by the Senior Vice President/CFO and ensures the utility's efficient operation by effectively managing and reporting on the corporate financial position, ensuring financial compliance with current legal and regulatory requirements, and providing timely financial support, services and guidance to internal and external stakeholders. This is accomplished through the following functions:

- Accounting and Business Planning:
    - Accounting – Responsible for accurate and timely accounting and financial reporting through the general accounting, property accounting, payroll, and accounts payable departments;
    - Business Planning – Ensures that SAWS' strategic objectives are financially supported through short and long range financial planning, developing and implementing the annual budget and developing rates sufficient to fund SAWS' capital and operating activities;

- Continuous Improvement and Innovation – Conducts business performance reviews and process analysis across the organization to streamline operations, maximize budgetary resources, promote efficiencies, enhance customer service and implement innovative management practices;
- Treasury – Responsible for banking relationships, investment and debt management, and remittance (customer payment) processing; and
- Purchasing – Manages the processing and contracting of all procurement requests for materials, supplies and services. Also manages the inventory control function.

INFORMATION SERVICES

Information Services delivers quality, secure, cost-effective applications and information technology services, designed to promote innovation to sustain growth and enable the System to better serve the community. This group is further broken down into the following departments:

- Enterprise Solutions:
    - Geographic Information Systems ("GIS") – Develops, analyzes and delivers geographic data and solutions related to SAWS infrastructure and activities.
    - Control Systems – Implements, monitors, and maintains supervisory control and data acquisition (SCADA) systems.
    - Enterprise Resource Planning – Responsible for the programming, configuration, implementation, support, and sustainability for all major business support applications.
    - Data and Platform Services – Manages the enterprise data warehouse, business intelligence and GIS platforms to provide SAWS timely information for decision making.
    - Innovative Systems – Delivers rapid and effective development of innovative solutions for SAWS with a specific focus on improving customer experience through technology.

- Shared Services – Supports SAWS' technology initiatives through project life-cycle management, metrics-based tracking, business process re-engineering, quality control/assurance, and organizational change management.
    - Client Services – Supports workstation and related peripheral devices across the System, including desktop support services as well as technology, software orders, and requisitions.
    - Billing and Print Shop – Provides computer operations and bill printing services as well as copy services.

- IT Infrastructure and Operations:
    - Operations – Manages telecommunication services including internet protocol (IP) telephony, teleconferencing, call center systems, interactive voice response systems, recording systems, digital radio systems and 911 systems.
    - Engineering – Provides network and internet services, including all aspects of network architecture and engineering, and wired and wireless network infrastructure for SAWS facilities.
    - Infrastructure – Responsible for all aspects of Systems' administration, database administration, systems software and hardware, the storage area network, backup and disaster recovery.
    - Information Security – Responsible for developing, monitoring, and maintaining cyber security controls to protect the confidentiality, integrity, and availability of enterprise data and information systems assets.

CUSTOMER EXPERIENCE AND STRATEGIC INITIATIVES

Customer Experience and Strategic Initiatives is responsible for providing the highest level of service to System customers at all times, responding in the most expedient and professional manner possible. This group is also responsible for the accurate and timely billing of System customers and maintenance of customer accounts. This group consists of the following departments:

- Billing and Customer Care – Reviews the billing process for accuracy of all the System's bills printed daily and resolves customer service billing issues. Also handles all inbound telephone, electronic and in-person customer inquiries regarding billing, account information, service problems and payments;
- Field Operations – Responsible for meter reading; service turn-on/off requests; and service investigations. Ensures service excellence through random verification of meter reads and reduces revenue losses through theft detection efforts;
- Performance Analysis and Training – Responsible for data analytics, training and process improvements throughout Customer Service; and
- Emergency Operations Center – Manages 24-hour emergency center and reports/dispatches crews for water leaks; main breaks, and overall tactical response to problems with the System.

Vice President and General Counsel. The Vice President and General Counsel provides legal advice and counsel to the Board and System management and is responsible for strategic management and all real estate assets and purchases, and administration of all contracts for construction and professional services. This group consists of the following departments:

- Legal Services – Provides full service, in-house legal support to the Board, Executive Management, and staff; manages the activities of outside legal counsel. The range of legal expertise includes water resources, labor and employment, litigation management, real estate, general transactional, environmental, and public law;
- Contracting – Manages the procurement and administration of all construction and professional services contracts in compliance with all applicable laws and oversees administration of the System's Award Winning Small, Minority, Women and Veteran Owned Business Program;
- Corporate Real Estate – Implements property acquisitions, dispositions, and lease management activities and supports all construction and maintenance activities by obtaining all rights of entry and easements; and
- Records Management – Manages all utility records in compliance with Texas Local Government Records Act, Texas Public Information Act, and best records management practices.

Vice President – Human Resources. The Vice President – Human Resources is responsible for all aspects of human resources. Human Resources engages in attracting, training, and retaining a workforce of qualified employees to help the System in reaching its organization goals and mission through a focus on excellence and continuous improvement. Human Resources consists of the following departments:

- Talent Acquisition & Succession – Proactively implements recruitment strategies to attract, secure and retain top talent for SAWS. Recruits employee resources required by all administrative and operational areas. Forecasts and assists organizational areas with succession management;
- Learning & Development – Develops strategies and designs for organizational development, talent and performance management, employee engagement, and change management functions. Manages learning initiatives around a continuous cycle of needs analysis, design, project management, delivery, and evaluation. Helps lead culture change through processes that support organizational learning, including the continual enhancement of the performance evaluation process;
- Employment Relations – Provides proactive assistance to employees and supervisors regarding the interpretation and implementation of policies, procedures, and directives. Provides direction and oversight for a variety of employment matters, including performance and disciplinary issues, investigations into formal complaints, and other workplace concerns;
- Compensation & Benefits – Plans, develops, and manages the employees' compensation, benefit and wellness programs, as well as balancing competitiveness and cost efficiency for these plans and programs. Responsible for the plan, development, and fiscal accountability of all medical and prescription plans, pension programs, wellness initiatives, and oversees the administration of these plans and programs;
- Risk Management – Addresses risk management issues, managing all facets of the comprehensive commercial insurance program including administration of premises risk assessments. Administers all workers compensation, casualty and subrogation claims; and

- Safety & Environmental Health – Coordinates all workplace safety activities to ensure a safe environment for employees. Partners with organizational management in anticipating safety challenges and exploring opportunities for improvement.

Vice President – Water Resources & Governmental Relations*.* The Vice President – Water Resources & Governmental Relations is responsible for the development and management of water supplies, drought management, and water rights acquisitions. The group consists of the following departments:

- Water Resources – Implements the SAWS' long-range Water Management Plan, through proactively managing existing supplies to ensure customer needs are met and leading efforts in the planning and development of new water supply opportunities to meet the City's population growth. Water Resources is also responsible for the marketing of the direct recycled water program as well as directing efforts to minimize non-revenue water and ensuring efficient use of water;
- Governmental Relations – Identifies and manages critical issues that have public impact and manages key strategic relationships with elected officials and agencies at the regional, state, and federal levels;
- Resource Protection & Compliance – Ensures water quality of all sources are protected; enforces the regulatory requirements established to protect regional water quality; monitors best management practices at construction sites; utilizes an extensive sampling and monitoring network for compliance purposes; and
- Environmental Laboratory Services – Provides analytical services that ensure data integrity, reliability, responsiveness, and accuracy for the monitoring and compliance of water quality. The lab is accredited by the Texas Commission on Environmental Quality (the "TCEQ") under the National Environmental Laboratory Accreditation Program.

Vice President – Communications & External Affairs*.* The Vice President – Communications & External Affairs is responsible for providing proactive strategic outreach and partnerships to inform and involve System customers and stakeholders, driving the image and success of the organization. This is accomplished through:

- Communications – Manages and directs mass communications efforts through the following departments:
    - Creative Services – Develops the creative content for all internal and external communication efforts including newsletters, brochures, website and advertisements; and
    - Public Relations – Manages news media relations for accuracy and appropriate messaging in news coverage concerning SAWS. Coordinates community events, manages social media content and directs advertising to promote awareness of SAWS programs, projects and image.

- External Affairs – Manages outreach efforts with customers, neighborhood and civic leaders, and City Council members. Develops and conducts adult and youth educational programs to inform and promote water awareness in our community; and
    - Conservation – Delivers nationally recognized programs that achieve cost-effective water savings while enhancing quality of life. San Antonio's cheapest source of water is conservation. To help keep rates affordable, SAWS aggressively promotes efficient commercial and residential water use through education, outreach, incentives and drought ordinance rules.

THE SYSTEM

The System includes all water resources, properties, facilities, and plants owned, operated, and maintained by the City relating to supply, storage, treatment, transmission, and distribution of treated potable water, and chilled water (collectively, the "Waterworks System"); collection and treatment of wastewater (the "Wastewater System"); and treatment and reuse of wastewater (the "Water Reuse System"). The System does not include any "Special Projects" which are declared by the City, upon the recommendation of the Board, not to be part of the System and are financed with obligations payable from sources other than ad valorem taxes, Pledged Revenues, or Net Revenues or any water or water-related properties and facilities owned by the City as part of the System.

In addition to the water related utilities, which the Board has under its control, on May 13, 1993, the City Council approved Ordinance No. 77949 which established initial responsibilities over the stormwater quality program with the Board and adopted a schedule of rates to be charged for stormwater drainage services and programs. As of the date hereof, the stormwater program is not a part of the System. (See "THE SAN ANTONIO WATER SYSTEM – Stormwater System" herein.)

Since 2006, the System has submitted 21 separate applications to the appropriate regulatory agency to expand its CCN (defined herein) or service areas, for water and sewer service, to the extraterritorial jurisdiction (the "ETJ") boundary of the City. These applications have added 28,309 acres to the water service area and 276,849 acres to the sewer service area. CCN jurisdiction was originally held by the Public Utility Commission of Texas (the "PUC"), then transferred to the TCEQ and more recently transferred back to the PUC. Consequently, when the appropriate regulatory agency grants a CCN to a water or sewer purveyor, it provides that purveyor with a monopoly for retail service. By expanding the CCN to the ETJ, developments needing retail water and sewer service within the ETJ must apply to SAWS. Service can then be provided according to System standards, avoiding small, undersized systems servicing new development. The expansion of the CCN to the ETJ supports development regulations for the City. Within the ETJ, the City has certain standards for the development that ensure areas developed in the ETJ and when annexed by the City will already have some City development regulations in place.

WATERWORKS SYSTEM

The City acquired its Waterworks System in 1925 through the acquisition of the San Antonio Water Supply Company, a privately owned company. Since such time and until 1992, when the System was created, management and operation of the Waterworks System was under the control of the City Water Board. The System's authority to provide potable water service within a defined area was established by Certificate of Public Convenience and Necessity No. 10640 ("CCN") originally issued by the Public Utility Commission of Texas on November 1, 1979, as amended and updated with substantial expansion as reflected in its certificate currently on file at the TCEQ. The System's Waterworks System service area currently extends over approximately 934 square miles, making it the largest water purveyor in Bexar County. The System serves approximately 93% of the water utility customers in Bexar County. As of December 31, 2019, the System provided potable water service to over 515,900 customer connections. Potable water service is provided to residential, commercial, multifamily, industrial, and wholesale accounts. The System monitors its Waterworks System on a constant basis to ensure compliance with the Safe Drinking Water Act. (See "ENVIRONMENTAL MATTERS AND REGULATORY MATTERS" herein.)

The Waterworks System currently utilizes 57 elevated storage tanks and 68 ground storage reservoirs, of which 28 act as both, with combined storage capacities of approximately 288 million gallons. As of December 31, 2019, the Waterworks System maintained 7,260 miles of distribution mains, ranging in size from 4 inches to 61 inches in diameter, the majority of which are between 6 inches and 12 inches in diameter.

WASTEWATER SYSTEM

The City Council created the City Wastewater System in 1894. A major sewer system expansion program began in 1960 with bond proceeds for new treatment facilities and an enlargement of the Wastewater System. In 1970, the City became the regional agent of the TCEQ. In 1992, the Wastewater System was consolidated with the City's Waterworks and Recycling Systems to form the System.

The System serves a substantial portion of the residents of the City, 12 governmental entities, and other customers outside the corporate limits of the City. As regional agent, the System has certain prescribed boundaries that currently cover an area of approximately 630 square miles. The System also coordinates with the City for wastewater planning for the City's total planning area, its ETJ, of approximately 1,107 square miles. The population for this planning area is approximately 1.6 million people. As of December 31, 2019, the System provided wastewater services to approximately 461,500 customer connections.

In addition to the treatment facilities owned by SAWS, there are seven other entities who operate sewage and treatment plants within Bexar County.

The Wastewater System is composed of approximately 5,630 miles of mains and three major treatment plants, Steven M. Clouse (formerly Dos Rios), Leon Creek, and Medio Creek. All three plants are conventional activated sludge facilities. The System holds Texas Pollutant Discharge Elimination System (the "TPDES") wastewater discharge permits, issued by the TCEQ for 187 million gallons per day ("MGD") in treatment capacity and 46 MGD in reserve permit capacity. See "ENVIRONMENTAL MATTERS AND REGULATORY MATTERS" herein. The permitted flows from the Wastewater System's three regional treatment plants represent approximately 98% of the municipal discharges within the City's ETJ.

CHILLED WATER SYSTEM

The System owns, operates, and maintains four thermal energy facilities providing chilled water services to governmental and private entities. Two of the facilities, located in the City's downtown area, provide chilled water to 21 customers. They include various City facilities such as the Henry B. Gonzalez Convention Center and the Alamodome, which constitute a large percentage of the System's downtown chilled water annual production requirements. In addition to City facilities, the two central plants also provide chilled water service to a number of major hotels in the downtown area, including the Grand Hyatt, Marriott Riverwalk, and Hilton Palacio Del Rio. The other two thermal energy facilities owned and operated by the System are located at the Port of San Antonio industrial area (formerly Kelly USA) and provide chilled water to large industrial customers that include Standard Aero and Boeing Aerospace. The System's chilled water producing capacity places it as one of the largest producers of chilled water in south Texas. The chilled water system had gross revenues of $10.6 million in Fiscal Year 2019. SAWS is currently taking steps to evaluate how best to optimize the value of the System. Among the options likely to be considered is a potential divestiture or privatization of the thermal energy system.

RECYCLING WATER SYSTEM

The System is permitted to sell Type I (higher quality) recycled water from its Water Recycling Centers located on the City's south side, and has been doing so since 2000. The water recycling program can produce up to 35,000 acre-feet per year of recycled water to commercial and industrial businesses in the City. The original system was comprised of two major transmission lines, running east and west. In 2008, these two major transmission lines were interconnected at the northern end, providing additional flexibility to this valuable water resource. In 2013, an additional Water Recycling Center and pipeline was connected to the western line, providing further recycled water system redundancy. Currently, approximately 130 miles of pipeline deliver highly treated effluent to approximately 60 customers. Recycled water is being delivered for industrial processes, cooling towers, and irrigation of golf courses and parks, all of which would otherwise rely on potable-quality water. Aside from supporting the local economy, this water recycling system also releases water into the upper San Antonio River and Salado Creek to sustain base flows. The result has been significant and lasting environmental improvements for the aquatic ecosystems in these streams.

Combined with the 50,000 acre-feet per year used by CPS Energy, this is the largest recycled water system in the United States. The System amended its contract with CPS Energy to provide such recycled water through 2060. The revenues derived from the CPS Contract have been excluded from the calculation of Gross Revenues, and are not included in any transfers by SAWS to the City.

STORMWATER SYSTEM

The TPDES is administered by the TCEQ. The System is a co-permittee with the City under TPDES Permit No. WQ0004284000 (the "Stormwater Permit"). The Stormwater Permit was originally issued on September 28, 2007 and amended on April 11, 2011, but expired on September 28, 2012. An application for renewal was submitted to the TCEQ and a Notice of Receipt for permit renewal was issued on June 7, 2012. The co-permittees continue to operate under the terms of the expired permit until its renewal by the TCEQ. The Stormwater Permit identifies the joint and individual requirements of the City and the System. Each of the co-permittees have developed a Stormwater Management Plan outlining their operational responsibilities. See "ENVIRONMENTAL MATTERS AND REGULATORY MATTERS" herein. An agreement between the System and the City for stormwater services has been in place since October 3, 1996.

In September of 1997, the City established a Stormwater Utility by ordinance. The System is contractually obligated to perform certain program requirements as described in the Stormwater Permit. The City has the overall responsibility for the program. The approved annual budget for the System's share of program responsibilities for Fiscal Year 2020 was approximately $5.2 million for which the System anticipates being reimbursed in full from the stormwater utility fee imposed by the City.

WATER SUPPLY

In 1996, the City Council initiated the current era of San Antonio water supply planning when it appointed a 34-member citizens committee to develop strategic policies and goals for management of the City's water resources. The Citizens Committee on Water Policy report, entitled "A Framework for Progress: Recommended Water Policy Strategy for the San Antonio Area," was unanimously accepted by the City Council and became the foundation of the System's efforts. On November 5, 1998, the City Council accepted the Water Resources Plan entitled "Securing Our Water Future Together" (the "1998 Plan") as the first comprehensive, widely supported water resource plan for the City. The 1998 Plan established programs for immediate implementation, as well as a process for developing long-term water resources. In October 2000, the City Council created a permanent funding mechanism (known as the Water Supply Fee) for water supply development and water quality protection through Ordinance No. 92753. The Water Supply Fee provides a specific fund for the development of water resources.

The 1998 Plan has subsequently undergone updates approximately every five years, with the most recent update having been approved by the Board in October 2017. The 2017 Water Management Plan outlines a diversified foundation for the City's water supply. While the Edwards Aquifer will always be the cornerstone of the City's water supply, the System has already successfully developed several additional groundwater and surface water resources from Canyon Lake, the Trinity Aquifer, the Carrizo Aquifer and the Wilcox Aquifer. The System's recycled water program provides highly treated wastewater to CPS Energy and other industrial and commercial customers who would otherwise use potable water. The System's underground Aquifer Storage and Recovery facility allows SAWS to retain excess Edwards Aquifer permitted water supplies during wet years and use in times of drought. In addition, the System is in the process of constructing the Central Water Integration Pipeline in order to receive and effectively distribute the total volume of Vista Ridge water to the SAWS distribution system. See "THE SAN ANTONIO WATER SYSTEM – Water Transmission and Purchase Agreement for Carrizo and Simsboro Aquifer Water" herein for a further description of the current status of this project. Over the past 20 years, SAWS has developed one of the most diversified and innovative water supply portfolios in the U.S. In doing so, the System has greatly reduced its reliance on the Edwards Aquifer while enhancing the System's ability to manage drought and accommodate projected growth.

As of December 31, 2019, the System's annual unrestricted, permitted contractual water supply includes the following:

Water Source	Acre-Feet	Percentage of Total Supply
Edwards Aquifer	271,147 (1)	43%
H_2Oaks Center Aquifer Storage and Recovery (underground storage)	178,880	29%
Recycled Water to CPS Energy	50,000	8%
Medina Lake and River System	29,974	5%
Recycled Water to Other Customers	25,000	4%
Trinity Aquifer	21,000	3%
Regional Carrizo Aquifer	12,188	2%
H_2Oaks Center Brackish Groundwater Desalination	11,200	2%
Local Carrizo Aquifer	9,900	2%
Western Canyon	8,500	1%
Canyon Regional Water Authority	6,300	1%
Total	623,089	100%

(1) Includes the former SAWS District Special Project (or "DSP", the mechanism by which SAWS assumed the former Bexar Metropolitan Water District, full integration of which occurred on January 1, 2017).

See "THE SAN ANTONIO WATER SYSTEM – Water Transmission and Purchase Agreement for Carrizo and Simsboro Aquifer Water" herein for a description of a recent (and significant) water resource acquisition.

EDWARDS AQUIFER BACKGROUND

The Edwards Aquifer, the cornerstone of the City's water supply, lies beneath an area approximately 3,600 square miles in size. Including its recharge zone, it underlies all or part of 13 counties, varying from five to 30 miles in width, and stretching over 175 miles in length, beginning in Brackettville, Kinney County, Texas, in the west and stretching to Kyle, Hays County, Texas, in the east. The Edwards Aquifer receives most of its water from rainfall runoff, rivers, and streams flowing across the 4,400 square miles of drainage basins located above it.

Much of the Edwards Aquifer region consists of agricultural land, but it also includes areas of population ranging from communities with only a few hundred residents to the City and its surrounding metropolis, which serves as a home for over two million residents. In 2018, the Edwards Aquifer directly supplied approximately 78% of the potable water for municipal, domestic, industrial, and commercial needs for the System's service area. Naturally occurring artesian springs, such as the Comal Springs and the San Marcos Springs, are fed by Edwards Aquifer water and are utilized for commercial, municipal, agricultural, and recreational purposes, while at the same time supporting ecological systems containing rare and unique aquatic life.

The Edwards Aquifer is a karst aquifer that recharges from seepage of water from streams and by precipitation infiltrating directly into the cavernous limestone outcroppings in its north and northwestern area. Practically continuous recharge is furnished by spring fed streams, with storm water runoff adding additional recharge. The historical annual average recharge, from 1934 to the present, to the aquifer is approximately 708,600 acre-feet. The average annual recharge over the last thirty years is approximately 851,700 acre-feet. The lowest recorded recharge was approximately 43,000 acre-feet in 1956, while the highest was approximately 2,485,000 acre-feet in 1992.

EDWARDS AQUIFER REGULATION

In 1993, the Texas Legislature adopted the Edwards Aquifer Authority Act (the "EAA Act"). This act created the Edwards Aquifer Authority ("EAA") as a conservation and reclamation district under Article XVI, Section 59, of the Texas Constitution. The EAA is governed by a 17 member Board of Directors, with 15 voting directors elected from single member districts apportioned to counties within the EAA's jurisdiction, and two non-voting directors appointed to reflect downstream and western regional interests, all pursuant to and in accordance with the EAA Act. The EAA has broad powers to manage, conserve, preserve, and protect the Edwards Aquifer and to increase the recharge of, and prevent the waste or pollution of water in, the Edwards Aquifer. Among other charges, the EAA was directed to limit groundwater withdrawals from the Edwards Aquifer through a permitting system. The EAA was also directed by the Texas Legislature to ensure that, not later than December 31, 2012, the continuous minimum springflows of the Comal Springs (in New Braunfels) and the San Marcos Springs (in San Marcos) are maintained to protect endangered and threatened species to the extent required by federal law and to achieve other purposes of the EAA Act. To date, the EAA's exercise of power has been primarily limited to managing Edwards Aquifer withdrawals, although the EAA has initiated efforts in recent years to regulate water quality (as evidenced by its adoption of rules concerning water quality).

As a consequence of the EAA's permitting regime, the System's access to Edwards Aquifer supplies is now limited to its highest, pre-1996 annual historic use plus any additional permitted withdrawal rights that the System can acquire by lease or purchase. As of December 31, 2019, through permitting, purchases, and leases, the System has access to 271,147 acre-feet per year of Edwards Aquifer groundwater withdrawal rights, which is approximately 47% of the regional pumping cap. See "THE SAN ANTONIO WATER SYSTEM – Edwards Aquifer Recovery Implementation Program and the Edwards Aquifer Habitat Conservation Plan" herein. The System owns approximately 256,586 acre-feet, of which a portion is committed to the EAA Regional Water Conservation Program and contractual lease agreements, the remainder is leased from permit holders. All Edwards Aquifer permitted withdrawal rights are subject to on-going regulation by the EAA, with more stringent use limitations applied during periods of drought.

EDWARDS AQUIFER MANAGEMENT; CITY'S EDWARDS AQUIFER MANAGEMENT PLAN

Edwards Aquifer Authority. Pursuant to applicable Texas law, including the EAA Act and legislation enrolled subsequent thereto serving to supplement and/or amend this legislation, the EAA has adopted rules that require a reduction in the amount of permitted Edwards Aquifer water rights that may be pumped annually for the duration of a drought event. During a period of drought management, water rights are impacted on a pro rata basis based on the number of days of a calendar year that there exists a particular category of drought (depending on severity) requiring a reduction in pumping. Reductions of permitted rights to withdraw water are generally applied to all permit holders, although there do exist some limited exceptions applicable to agricultural users. The various stages of reduction in permitted water rights are declared by the EAA General Manager in accordance with rules adopted by the EAA Board of Directors and impact the System's access to its permitted Edwards Aquifer water rights, without input or action by the City or the System. The EAA's drought triggers and requisite reduction in pumping for the San Antonio and Uvalde Pools of the Edwards Aquifer are indicated in the following tables. The entirety of the System's Edwards Aquifer water rights is subject to the restrictions associated with the San Antonio Pool.

SAN ANTONIO POOL				
Comal Springs Flow(1)	San Marcos Springs Flow(1)	Index Well J-17 Level(2)	Critical Period Stage(3)	Withdrawal Reduction (%)
< 225	< 96	< 660	I	20
< 200	< 80	< 650	II	30
< 150	N/A	< 640	III	35
< 100	N/A	< 630	IV	40
< 45/40(4)	N/A	< 625	V(4)	44
UVALDE POOL				
Comal Springs Flow(1)	San Marcos Springs Flow(1)	Index Well J-27 Level(2)	Critical Period Stage(3)	Withdrawal Reduction (%)
N/A	N/A	N/A	I	N/A
N/A	N/A	< 850	II	5
N/A	N/A	< 845	III	20
N/A	N/A	< 842	IV	35
N/A	N/A	< 840	V	44

(1) Measured in cubic feet per second.
(2) Measured in mean sea level.
(3) A change to a critical period stage with higher withdrawal reduction percentages, including initially into Stage I for the San Antonio Pool and Stage II for the Uvalde Pool, is triggered if the 10-day average of daily springflows at the Comal Springs or the San Marcos Springs or the 10-day average of daily Edwards Aquifer levels at the J-17 or J-27 Index Wells, as applicable, drop below the lowest number of any of the trigger levels for that stage. A change from any critical period stage to a critical period stage with a lower withdrawal reduction percentage, including existing from Stage I for the San Antonio Pool and Stage II for the Uvalde Pool, is triggered only when the 10-day average of daily springflows at the Comal Springs and the San Marcos Springs and the 10-day average of daily Edwards Aquifer levels at the J-17 or J-27 Index Wells, as applicable, are all above the same stage trigger level.
(4) In order to enter into Critical Period Stage V, the applicable springflow trigger is either less than 45 cubic feet per second based on a ten-day rolling average or less than 40 cubic feet per second based on a three-day rolling average. Expiration of Critical Period Stage V is based on a ten-day rolling average of 45 cubic feet per second or greater.

Due to varying weather patterns, the EAA has, from time to time, imposed various Critical Period Stage withdrawal reduction notices. For any current drought restrictions, as well as additional information on the various levels of drought restrictions imposed by the EAA and current level of the Edwards Aquifer, see www.edwardsaquifer.org. On July 9, 2020, the EAA declared Stage 1 pumping restrictions for users within the San Antonio pool.

City's Edwards Aquifer Management Plan. In addition, and separate and apart from the EAA's rules governing withdrawal of Edwards Aquifer water during drought, the City has established a proactive Aquifer Management Plan to manage the region's water resources during periods of drought. Established by City ordinance, the Aquifer Management Plan also restricts outdoor water use based on specific levels of the Edwards Aquifer. The City approved the following Edwards Aquifer level triggers in 2009 and updated certain revisions to the water use restrictions in 2014.

Year Round – Year round restrictions are in effect when the Edwards Aquifer level is above 660 feet mean sea level at the monitored well (J-17 Index Well). During year round watering restrictions, SAWS customers are permitted to water landscape with an irrigation system or sprinkler any day of the week before 11 a.m. or after 7 p.m. Hand watering with a hand-held hose, drip irrigation, soaker hose or bucket is permitted any time of day.

Stage One – Stage One restrictions begin when the 10-day rolling average of the Edwards Aquifer level drops to 660 feet mean sea level at the monitored well (J-17 Index Well). SAWS customers are limited to one-day-per week landscape watering with an irrigation system or sprinkler based on the last number of the customer's street address and are only allowed to water before 11 a.m. or after 7 p.m. Watering with a hand-held hose, drip irrigation, bucket, or watering can is permitted at any time and any day.

Stage Two – Stage Two restrictions begin when the 10-day rolling average of the Edwards Aquifer level drops to 650 feet mean sea level at the monitored well (J-17 Index Well). SAWS customers are limited to one-day-per week landscape watering with an irrigation system or sprinkler based on the last number of the customer's street address and are only allowed to water from 7 a.m. to 11 a.m. and 7 p.m. to 11 p.m. Watering with a hand-held hose is allowed any time on any day.

Stage Three – Stage Three restrictions may begin when the 10-day rolling average of the Edwards Aquifer level drops to 640 feet mean sea level at the monitored well (J-17 Index Well) and the total supply of water to SAWS from the Edwards Aquifer and other available sources is insufficient to meet customer demand while complying with applicable regulations governing water supply withdrawals. SAWS customers are limited to landscape watering with an irrigation system or sprinkler once every other week based on the last number of the customer's street address and are only allowed to water from 7 a.m. to 11 a.m. and from 7 p.m. to 11 p.m. on their assigned day. Watering with a hand-held hose is allowed any time on any day.

Stage Four – Stage Four restrictions may be declared if the total supply of water from the Edwards Aquifer and other available water sources to SAWS is insufficient to meet customer demand while complying with applicable regulations governing water supply withdrawals. Stage Four restrictions may be declared at the discretion of the City Manager upon completion of a 30-day monitoring period following Stage Three declaration. SAWS customers are limited to landscape watering with an irrigation system or sprinkler once every other week based on the last number of the customer's street address and are only allowed to water from 7 a.m. to 11 a.m. and from 7 p.m. to 11 p.m. on their assigned day. Also during Stage Four, a drought surcharge is assessed on all accounts for water used or assumed to be used for landscape irrigation. The surcharge is the highest volumetric rate assessed by SAWS and is assessed on any residential and irrigation account with monthly water usage exceeding 12,717 and 5,236 gallons, respectively. The surcharge rate is assessed in addition to the regular water and wastewater rates. Watering with a hand-held hose is allowed any time on any day.

EDWARDS AQUIFER RECOVERY IMPLEMENTATION PROGRAM AND THE EDWARDS AQUIFER HABITAT CONSERVATION PLAN

In 2007, the Texas Legislature adopted legislation commonly known as Senate Bill 3 ("SB 3") to address various water-related environmental issues confronting the State. Among other provisions, the legislation established a new, higher pumping cap of 572,000 acre-feet for the Edwards Aquifer, thus making more water available for pumping when Edwards Aquifer levels are high. However, it also incorporated into State statute certain existing regulatory restrictions on water availability during periods of drought. When Edwards Aquifer levels at certain gauges and springflows at Comal Springs and San Marcos Springs fall to identified trigger points, pumping allocations are reduced by the EAA by 20% to 44% depending on the severity of the drought. In February 2009, the City's Code of Ordinances was updated to ensure that restrictions on water usage by City residents are permitted to commence in close proximity to the occurrence of these restrictions on pumping by SAWS and other water purveyors in the City. (See "THE SAN ANTONIO WATER SYSTEM – Edwards Aquifer Management; City's Edwards Aquifer Management Plan".) The EAA made changes to these restrictions in 2012 as part of the Edwards Aquifer Habitat Conservation Plan (the "HCP").

SB 3 also directed the EAA to develop a Recovery Implementation Program for federally listed threatened or endangered species associated with the Edwards Aquifer. The legislation called for the program to be developed through a facilitated, consensus-based process that involved input from the United States Fish and Wildlife Service (the "USFWS"), other appropriate federal agencies, and all interested stakeholders. The EAA and certain State agencies were specifically charged to develop and execute a program document that may be in the form of an HCP used in issuance of an Incidental Take Permit ("ITP").

In response to this directive, the EAA and various regional stakeholders initiated the Edwards Aquifer Recovery Implementation Program ("EARIP") in 2007. On November 7, 2011, the EARIP steering committee and stakeholders endorsed the final draft of the HCP, an Implementing Agreement, and a Funding and Management Agreement by a vote of 24-1 (with one abstention) all of which were recommended to the Board of Directors of the EAA. The stakeholders and the members of the Steering Committee reached broad consensus on the fundamental elements and associated details of a multi-year adaptive management plan which formed the foundation of the HCP in support of the desired ITP with a term of 15 years. The stakeholders also reached consensus on the level of springflow to be achieved by Phase One of the management plan. Studies and action undertaken during Phase One will determine whether different levels of springflow need to be pursued in Phase Two.

The City, acting by and through SAWS, along with the EAA, the City of New Braunfels, the City of San Marcos, and Texas State University – San Marcos, filed an application for an ITP to protect future groundwater withdrawals from the Edwards Aquifer and other activities affecting listed threatened or endangered species associated with the Edwards Aquifer. On March 18, 2013, the USFWS approved the submitted HCP and issued ITP No. TE63663A-0.

These five entities are individually, and in certain cases collectively, responsible for implementing the conservation measures, as well as the minimization and mitigation measures, defined in the HCP. With the addition of the Guadalupe-Blanco River Authority ("GBRA") as a non-voting observer, these five partners comprise the HCP Implementing Committee. The HCP Implementing Committee is responsible for supervising all aspects of the implementation of the HCP, including routine decisions and strategic policy matters. The HCP Implementing Committee operates under a requirement of 100% consensus agreement. The System is active and engaged in the HCP Implementing Committee.

The Steering Committee of the EARIP has transitioned into the role of a Stakeholder Committee. The Stakeholder Committee will consult with and advise the program manager and HCP Implementing Committee. The System is represented on and engages with the Stakeholder Committee.

The Phase One activities associated with ensuring minimum continuous springflows included a Voluntary Irrigation Suspension Program Option ("VISPO"), a Regional Conservation Program, prescribed use of the Aquifer Storage and Recovery ("ASR") Facility, and an EAA Critical Period Stage V Drought Management stage as a back-up to the other activities. The ASR commitment anticipates that the EAA will lease and deliver to SAWS up to 50,000 acre-feet of Edwards Aquifer groundwater withdrawal rights for pumping and storage in the ASR Facility during periods of water availability. SAWS will then be required at certain drought trigger levels over a 10-year period similar in hydrologic character to the drought of record to forbear pumping from the Edwards Aquifer in like amounts to what was previously stored on behalf of the HCP (up to 46,300 acre-feet of water in the driest year). SAWS may use the ASR, or other supplies of water, to accomplish this forbearance at its discretion. EAA Critical Period Stage V pumping restrictions could reduce firm yield of Edwards Aquifer permits to 56% of the face permit amount if the San Antonio Pool of the Edwards Aquifer reaches one of the Stage V trigger levels. The 2017 Water Management Plan accounted for and addressed these changes.

In addition to the springflow management activities, the proposed management plan requires mitigation and habitat restoration activities at the Comal and San Marcos Springs. These activities include recreation management, additional biological research, modeling enhancement, expansion of refugia facilities, and control of non-native species. Ongoing effort in all of these activities are showing positive benefits to the endangered species as documented in the HCP annual reports.

The HCP entered a significant new chapter with the approval of the Phase Two work plan in May 2019. The Stakeholder and Implementing Committees, through strategic adaptive management, agreed to the course of actions through 2028. Considering all information through Phase One and the comprehensive assessment done by the National Academies of Sciences, the decision was a continuation of Phase One measures (with minor changes outlined in the Phase Two work plan) to be implemented to satisfy the term of the permit through 2028. Generally, the cost would remain the same, as conservation measures were optimized based on real world experience and research opportunities prioritized. The region can now focus on future collaborative longer-term agreement protections for endangered species and aquifer users alike. For more information on the EAHCP, see www.edwardsaquifer.org/habitat-conservation-plan/.

In 2011, the EARIP determined that the imposition of fees on pumpers of Edwards Aquifer groundwater was the best available way to fund the activities of the HCP. Due to the legislative cap on agricultural pumping fees, the burden of EARIP's program costs fell upon municipal and industrial pumpers. The EAA approved an annual special program fee of $50/acre-foot to support the HCP (in addition to the standard EAA management fee), which became effective April 2, 2012. The total EAA annual fee has been $84/acre-foot since 2015. The EAA anticipates maintaining total management fees of $84/acre-foot for the near-term, but may adjust the balance between the special program fee (HCP) and the standard EAA management fee (operations). In 2019, the Texas Legislature passed HB 2729 which enables the EAA to increase Aquifer Management Fees up to, but not to exceed, eight percent annually.

In 2013, the HCP was nominated for and awarded the prestigious Secretary of the Interior's Partners in Conservation Award, a national award presented annually to the nation's premier conservation programs. The Partners in Conservation Awards recognize outstanding examples of conservation achievements that highlight cooperation among diverse federal, state, and local governments; public and private entities; non-profit organizations; and individuals. The Award was presented by the Secretary of the Interior to the HCP participants, including the System, in January 2014 in Washington, D.C. In 2016, the City of San Marcos and Texas State University were recognized for ecological restoration of the San Marcos River shorelines, funded by the HCP, with the TCEQ's Texas Environmental Excellence Award.

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WATER PRODUCTION

The table below provides a summary of the annual potable water production by source for distribution to System customers, followed by descriptions of the various water sources.

Total Distribution to Customers by Year (in acre-feet)	2016	2017	2018	2019
Edwards Aquifer	194,708	194,858	192,748	191,941
H_2Oaks ASR Production	2,139	1,187	4,460	3,930
Trinity Aquifer	17,652	12,803	9,047	17,141
Medina Lake and River System	-	-	-	-
Regional Carrizo Aquifer	10,014	13,188	10,780	11,404
H_2Oaks Brackish Groundwater Desalination	911	5,596	4,851	4,593
Local Carrizo Aquifer	-	1,982	7,348	6,504
Western Canyon	8,980	8,649	8,467	8,038
Canyon Regional Water Authority	1,461	2,468	3,712	2,793
Total Distribution	**235,864**	**240,731**	**241,412**	**246,344**

H_2OAKS CENTER

SAWS H_2Oaks Center located in far south Bexar County is home to three water supplies, all operated from the H_2Oaks control room. These include the Aquifer Storage & Recovery, Local Carrizo Aquifer Project, and Brackish Groundwater Desalination Program.

AQUIFER STORAGE AND RECOVERY

An ASR project involves injecting ground or surface water into an aquifer, storing it and later retrieving it for use. Essentially, it accomplishes storage that is traditionally provided through surface water reservoirs without the concern of evaporation. The ASR is primarily designed to optimize use of water from the Edwards Aquifer; the optimization takes place when aquifer levels are high and the System is able to store excess Edwards Aquifer water rights to help offset demand on the Edwards Aquifer when those levels reach critical period reduction stages. During those critical period reduction stages the System may deliver stored Edwards Aquifer water from ASR to its customers. The reduced demand helps slow the downward trend of declining levels until rain events return to recharge the Edwards Aquifer.

In 2006, the ASR became an integral component of the System's drought management strategy, and in the 2009 Water Management Plan, the role of the ASR was expanded to use the facility as a longer-term storage reserve and to expand the ASR storage capability to serve as a long-term strategy to optimize available water resources. The System plans for a total storage volume of 200,000 acre-feet, including the amounts stored under the EAHCP. Also, as described under "THE SAN ANTONIO WATER SYSTEM - Edwards Aquifer Recovery Implementation Program and the Edwards Aquifer Habitat Conservation Plan" herein, the ASR is an integral component of the HCP.

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The System has stored and recovered Edwards Aquifer water from the ASR based on annual weather patterns. The chart below provides a summary of the acre-feet of Edwards Aquifer water stored and recovered each year since 2004 when the ASR became operational, as well as the amount of Edwards Aquifer water stored on behalf of the HCP. A total volume of up to 126,000 acre-feet is committed to the successful implementation of the HCP.

H$_2$Oaks Aquifer Storage and Recovery (acre-feet)				
Year	SAWS ASR Recharge	EAHCP Recharge	ASR Recovery	Total ASR Storage
2004	5,527		461	5,066
2005	13,491		937	17,620
2006	9,056		6,391	20,285
2007	20,200		432	40,053
2008	10,849		1,250	49,652
2009	17,007		1,448	65,211
2010	25,532		1,706	89,037
2011	12,054		13,223	87,869
2012	11,485		4,436	94,917
2013	6,201	1,868	14,711	88,275
2014	783	4,031	19,562	73,527
2015	9,135	12,075	5,840	88,897
2016	987	33,259	2,139	121,004
2017	2,889	31,475	1,418*	153,949
2018	3,058	16,667	4,460	169,214
2019	0	13,597	3,930	178,880
2020**	0	6,815	2,221	183,081

** Includes operational authorized water use not put in distribution.*
*** As of June 30, 2020.*

LOCAL CARRIZO AQUIFER PROJECT

The System has access to a total of 9,900 acre-feet per year of Carrizo Aquifer groundwater on property owned by SAWS at the H$_2$Oaks Center. The production of water from the Local Carrizo Aquifer will reduce the effects of the naturally occurring movement of ASR water stored nearby and provides increased operational flexibility of recovering ASR water.

Timing of additional phases of this project will be based upon population and System demand projections. These additional phases are projected to provide an additional 21,000 acre-feet per year of Carrizo Aquifer groundwater from properties proximal to the H$_2$Oaks facility, and can be designed and constructed quickly relative to other supplies while tying easily into existing infrastructure.

BRACKISH GROUNDWATER DESALINATION PROGRAM

The brackish groundwater desalination ("BGD") program involves the production of brackish (salty) groundwater from the Lower Wilcox Aquifer in southern Bexar County, and reverse osmosis treatment to drinking water standards at the System's H2Oaks Center. A BGD program is well suited for the south central Texas region, which contains more than 300 million acre-feet of brackish groundwater.

After a period of testing the BGD Plant became fully operational in November 2016, and was commissioned and named "H2Oaks Center" in January 2017. Full operational capacity is currently 11,200 acre-feet per year of drought-proof desalinated groundwater. Future phases can bring the total supply from this project to 33,600 acre-feet per year. Development of additional phases of the project will be determined based on population and demand projections of the System. The System's 2017 Water Management Plan determined additional phases may not be required for decades dependent upon the ultimate quantity of water received under the hereinafter-defined Water Transmission and Purchase Agreement for Carrizo and Simsboro Aquifer Water and the success of the System's conservation initiatives (see "THE SAN ANTONIO WATER SYSTEM – Conservation" herein).

The City has received support for this project from the TWDB through subsidized loans. In December 2009, the City sold to TWDB its "Water System Junior Lien Revenue and Refunding Bonds, Series 2009A" pursuant to the TWDB's Water Infrastructure Fund ("WIF") program to provide funds for the planning and design (and to refund outstanding commercial paper notes initially issued) for the desalination project. In August 2011, the City sold its "Water System Junior Lien Revenue Bonds, Series 2011", for the construction of production wells, a test injection well, and property acquisition for the Phase One production well fields, and in May 2013, the City sold its "Water System Junior Lien Revenue Bonds, Series 2013A (WIF)" for construction related costs of the desalination project.

Trinity Aquifer Projects

The System reached a milestone in February 2002 with the introduction of the first non-Edwards Aquifer drinking water supply from the Lower Glen Rose/Cow Creek formation of the Trinity Aquifer in northern Bexar County. The System has wholesale contracts with Massah Corporation ("Oliver Ranch") and the System owned and controlled Timberwood Park wellfield for the System for purchase and delivery of up to 3,000 acre feet per year of non-Edwards Aquifer groundwater from the Trinity Aquifer from north-central Bexar County.

In July 2012, SAWS entered into an agreement with Water Exploration Company, Ltd. ("WECO") to purchase groundwater produced by WECO from the Trinity Aquifer. The agreement expires in 2027, with two optional five year extensions. Currently, SAWS is obligated to purchase up to 17,000 acre-feet per year in monthly increments not to exceed 1,417 acre-feet. SAWS is only required to pay for water made available which meets all State and federal drinking water standards. The actual amount of water produced will depend on the level of the Trinity Aquifer.

Western Canyon Project

The System, along with entities in Comal and Kendall Counties (together, the "Participants"), contracted with the GBRA to deliver water from the Canyon Lake Reservoir. The System has been receiving project water since April of 2006 with the System receiving all water produced by the project that is not used by other Participants. Over time, the amount received could decline to a guaranteed amount of 4,000 acre-feet as GBRA's in-district Participants in the project complete infrastructure necessary to enable them to obtain their contracted supply and their growth allows the Participants to utilize their full allotment of reserved water. Pursuant to its terms, the contract with GBRA will terminate December 31, 2037, with an option to extend if agreed upon by both parties.

Regional Carrizo Program

The System has been receiving Carrizo Aquifer water from an agreement with the Schertz/Seguin Local Government Corporation (the "SSLGC") since late 2013 and producing water from the System's Buckhorn wellfield located in western Gonzales County since 2014.

Since 2010, the System has held a single permit with the Gonzales County Underground Water Conservation District (the "District") to produce and export 11,688 acre-feet per year of groundwater from the Carrizo Aquifer. The District is a local governmental entity with a locally elected Board of Directors (the "District Directors"), and operates pursuant to statutory authority set forth in Chapter 36, Texas Water Code, as amended and the rules adopted by the District Directors. The operating component of the permit had a five-year term, with an expiration date of July 12, 2015. The transportation component of the permit had a term of thirty years as was required by State statute. The System filed a timely request for renewal of the permit in accordance with the District's rules. The District's General Manager determined that the Reginal Carrizo Program was in substantial compliance with the District's rules, thereby entitling the System to renewal of the permit by the District Directors under the District's existing rules.

On July 14, 2015, the District Directors tabled scheduled action to renew the permit. Pursuant to the existing District rules and the terms of the permit, the permit remained effective until the District Directors acted on the renewal request. Over the course of the following three months, the District adopted new rules but took no action on the System's request for renewal of the permit. New rules adopted by the District on October 10, 2015, provide as follows: "An operating permit subject to renewal shall be administratively renewed for a period of five years in accordance to the rules in effect at the time of renewal." The rules no longer provide that a permit such as the System's will remain valid until action by the District Directors on a renewal request.

The Texas Water Code provided, at the time of SAWS' application, that an application such as the System's uncontested request for permit renewal shall be acted on by a groundwater district's board of directors at a publicly called and posted meeting, unless the board by rule has delegated to the general manager of the district the authority to act on the application. The District Directors have not acted on the System's application and has not delegated authority to the District's General Manager to act on the application. Nonetheless, the System subsequently received two permits from the District. One permit is titled "Production Permit" and the other permit is titled "Export Permit". Both permits were signed by the President of the District on November 10, 2015. The term of the Production Permit is five years. The term of the Export Permit is 30 years subject to periodic review by the District Directors. The Production Permit includes the following notation: "Auto Permit Granted: July 13, 2015." The Export Permit includes the following notation: "Auto Permit Granted: July 13, 2010."

In order to minimize the cost of transporting the water, SAWS negotiated a contract with the cities of Schertz and Seguin and the SSLGC for shared use of that entity's existing infrastructure in Gonzales County and Guadalupe County, located in the vicinity of the System's project well field. The SSLGC is a statutory quasi-governmental corporation created by the cities of Schertz and Seguin to develop and operate a ground water supply for those municipalities. It also provides services to certain other small municipalities in the area.

Negotiations concluded in December 2010 and were formalized by the Board, the Board of Directors of the SSLGC, and the City Councils of Schertz and Seguin on February 1, 2011 when they entered into the Mutual Regional Water Supply Contract, as amended January 1, 2017 (collectively, the "MRWS Contract"). On July 19, 2012, the SSLGC initially delivered its $25,425,000 Contract Revenue Bonds, Series 2012 (San Antonio Water System Expansion Water Treatment Project 2) (the "Series 2012 Bonds"), the repayment of which is secured by the payments to be made by SAWS to the SSLGC under the aforementioned MRWS Contract. As a result of the issuance of these contract revenue bonds, the obligation of the System to make payments to SSLGC under the MRWS Contract, as Maintenance and Operating Expenses of the System, is unconditional. In addition to funding the expansion of the treatment facilities, the System will pay the SSLGC for water treatment and transportation services relative to the 11,688 acre-feet per year of water expected to be produced by SAWS from the Carrizo Aquifer. The System may also purchase surplus water produced by SSLGC at the same rate charged to the cities of Schertz and Seguin. Utilizing SSLGC's pipeline reduced the capital investment by SAWS necessary to complete this water supply project by approximately $88 million. On December 17, 2019, SSLGC issued its $19,575,000 Contract Revenue Refunding Bonds, Series 2019 (San Antonio Water System Expansion Water Treatment Project 2), refunding certain Series 2012 Bonds for debt service savings.

CANYON REGIONAL WATER AUTHORITY; LAKE DUNLAP AND WELLS RANCH

The Canyon Regional Water Authority ("CRWA") is a public entity created by the Texas Legislature to develop non-Edwards Aquifer water supplies for its members. The CRWA has a contract with GBRA for the purchase of raw water from Canyon Lake, and has constructed a treatment plant for the water downstream on Lake Dunlap. Under various agreements with CRWA and other parties, SAWS may purchase up to 4,000 acre-feet annually of Lake Dunlap surface water through 2023, of which, 500 acre-feet is sub-leased to Springs Hill Water Supply Corporation through 2023. Effective 2024, CRWA will provide 4,000 acre-feet of groundwater to replace the 4,000 acre-feet of surface water produced from Lake Dunlap.

Under a separate agreement, CRWA provides SAWS 2,800 acre-feet annually of groundwater from the Carrizo-Wilcox Aquifer in Gonzales and Guadalupe Counties, known as the Wells Ranch Project. The agreement between SAWS and CRWA for the purchase of water from the Wells Ranch Project expires in 2047, but includes an extension option.

SAWS has an unconditional obligation to pay debt service on various bonds issued by CRWA for improvements to the Lake Dunlap, Mid-Cities, and the Wells Ranch Projects that benefit the production of water for SAWS. The obligation to pay the debt service to CRWA is a Maintenance and Operating expense of SAWS.

WATER TRANSMISSION AND PURCHASE AGREEMENT FOR CARRIZO AND SIMSBORO AQUIFER WATER

In an effort to achieve significant diversification of the City's water supply, the Board, on January 14, 2011, solicited requests for competitive sealed proposals for the provision and delivery of alternative water supplies for the purpose of meeting the System's water supply needs (the "Solicitation"). In response to the Solicitation, the Board received nine responses, from which three finalists were eventually selected and reviewed prior to determining that a joint-venture proposal (such proposer, Abengoa Vista Ridge, LLC, hereafter referred to as "Abengoa VR") to deliver Carrizo and Simsboro aquifer water presented the most advantageous possibility for the City to obtain an alternative water source. On July 1, 2014, the Board formally selected the water supply proposal of Abengoa VR as the most advantageous to the System, subject to negotiation of an acceptable contract and City Council support.

On September 29, 2014 and October 15, 2014 the Board adopted resolutions, and on October 30, 2014 the City Council unanimously adopted an ordinance, approving the execution of a Water Transmission and Purchase Agreement (the "Agreement") between the City, acting by and through SAWS, and Abengoa VR, pursuant to which Abengoa VR committed to make available to SAWS, and SAWS agreed to pay for, up to 50,000 acre-feet of potable water ("Project Water") per year for an initial period of 30 years plus a limited (20 year) extension period under certain events (hereinafter referred to as the "operational" phase). To produce and deliver the Project Water, Abengoa VR planned to develop well fields to withdraw water from the Carrizo and Simsboro aquifers in Burleson County, Texas pursuant to currently-held long-term leases with landowners and construct (or cause to be constructed) a 142-mile pipeline from this well field to northern Bexar County (the well fields, pumping and treatment facilities and the pipeline, together, the "Project"). The pipeline will ultimately be connected to SAWS' distribution system at this delivery point in northern Bexar County (the "Connection Point").

On November 19, 2015, the City Council approved a series of increases to the Water Supply Fee to finance the acquisition of new water supplies, including the Project. To date, SAWS has implemented five increases, with the fifth and final increase taking effect in January 2020. This final rate adjustment is anticipated to increase the average monthly SAWS residential bill by approximately 10%.

In early 2016, following commencement of pre-insolvency proceedings in Spain by Abengoa SA, the parent company of Abengoa VR ("Abengoa Parent"), Abengoa VR solicited proposals to sell up to 80% of the equity interest in Abengoa VR. On March 22, 2016, SAWS received notice that Garney P3 LLC ("Garney", who is wholly owned by Garney Companies, Inc. and referred to herein as "Garney Company", who is wholly owned by Garney Holding Company, and referred to herein as "Garney Parent"; Garney, Garney Company and Garney Parent are collectively referred to herein as the "Garney Parties") had reached agreement with Abengoa Parent, Abengoa Water USA LLC ("Abengoa Water") and Abengoa VR (Abengoa Parent, Abengoa Water and Abengoa VR collectively referred to herein as the "Abengoa Parties"), for the sale and purchase of an 80% equity interest in Abengoa VR (such agreement, the "Equity Purchase Agreement"; such transferred interest in Abengoa VR, the "Transferred Project Company Interest"). In May of 2016, the SAWS Board approved this agreement and the transfer was completed in June. Subsequently, the Board of Directors of Abengoa VR changed the company name to Vista Ridge LLC. During early 2017, Garney reached an agreement to sell a 29% equity stake in Vista Ridge LLC to Ridgewood Infrastructure. As this sale did not result in a change of control within Vista Ridge LLC, SAWS approval was not required as a condition to its effectiveness.

The Agreement is separated into three distinct phases. The "development" phase commenced on November 4, 2014, which was the date of complete execution and delivery of the Agreement. The "development" phase concluded on November 2, 2016 upon satisfaction of certain contractual requirements, referred to as "financial closure", and conclusion of which commenced the "construction" phase of the Project. During the "construction" phase of the Project, SAWS also is constructing improvements to the System necessary to accept and integrate the Project Water. The capital cost of SAWS' improvements is currently projected at approximately $220 million of which approximately $204 million had been expended as of June 30, 2020. The "construction" phase of the project was completed on April 15, 2020 (when the aforementioned 30-year "operational" phase commenced, also known as the "Commercial Operation Date"), during which period SAWS is obligated to pay for Project Water (up to 50,000 acre-feet annually) made available to it by Vista Ridge LLC at the Connection Point. At the end of the "operational" phase, ownership of the Project will be transferred to SAWS at no cost. SAWS has also entered into a separate agreement with Blue Water Vista Ridge, LLC, the lessee of the Project Water, to continue to acquire the 50,000 acre-feet of untreated groundwater, for an additional 30 year period upon the termination of the Agreement and transfer of the Project to SAWS. Blue Water Vista Ridge, LLC has received production and transportation permits for the Project Water from the Post Oak Savannah Groundwater Conservation District ("POSGCD"). The cost of such water at the end of the Agreement will be tied to the costs of then-prevailing two-year Edwards Aquifer water leases.

Pursuant to the terms of the Agreement, SAWS will pay costs arising under the Agreement, as Maintenance and Operating Expenses of the System, only for Project Water made available at the Connection Point (which payment will include the costs of operating and maintaining the Project). SAWS will have no obligation to pay for any debt issued by Vista Ridge LLC, and any such debt will be non-recourse to SAWS.

On May 17, 2016, SAWS exercised its contractual right to fix the capital and "Raw Groundwater Unit Price" under the Agreement based on the methodology provided for therein. The cost of the Project Water component under this agreement has been established at $1,606 per acre foot, which will remain capped for the entire 30 year term (and any extension of that term) of the Agreement. SAWS is also responsible for paying the Project operations and maintenance (as a direct pass through under the Agreement) and Project electricity. The initial total delivered costs for this water is approximately $2,100 per acre foot.

In early 2018, Ridgewood Infrastructure, as lead agent for Vista Ridge LLC, began the process to select an operating service provider for the Project. Vista Ridge LLC ultimately selected EPCOR Services, Inc. ("EPCOR"), a wholly owned subsidiary of EPCOR USA, Inc., an entity ultimately owned by the Canadian City of Edmonton. On November 13, 2018, the SAWS Board approved the selection of EPCOR as operating service provider and the form of operating service agreement. The approved form of operating service agreement provides for a primary 30-year term contemporaneous with the term of the Agreement. The execution of the operating service agreement, along with a purchase by EPCOR of a 5% equity interest in Vista Ridge LLC (from the equity interest of Ridgewood Infrastructure in Vista Ridge LLC) occurred on November 21, 2018. The equity interest of Vista Ridge LLC is currently owned by the following: Garney with 51%, Ridgewood Infrastructure with 24%, Abengoa with 20%, and EPCOR with 5%. Garney has indicated its intent to transfer its remaining 51% equity interest in Vista Ridge LLC to Ridgewood Infrastructure now that the "construction" phase has been completed and the Commercial Operation Date has been achieved. Any such transfer will require the consent of SAWS, which may be provided at its sole discretion.

SAWS began the process for design and construction of the facilities necessary to integrate the Project Water into the SAWS' distribution system upon financial close by the Project Company with the intent to complete such improvements prior to the start of the operational phase of the Project on April 15, 2020. Due to some construction delays, all of the required integration improvements were not completed until early July 2020. In connection with the initial startup and integration of the Project Water into the SAWS' potable water distribution system, discharges of Project Water received by SAWS were made to an adjoining creek bed. On July 17, 2020, SAWS received a letter from the POSGCD alleging that SAWS' discharge of certain amounts of Project Water for a period between April 15, 2020 and June 12, 2020 constituted an impermissible waste of groundwater under Chapter 36, as amended, Texas Water Code. POSGCD recognized that it does not appear to have regulatory authority over SAWS.

On this same date, SAWS received copies of two other letters from POSGCD. One letter was addressed to Blue Water Vista Ridge, LLC, the holder of Project Water production and transportation permits. POSGCD notified the permittee that it is pursuing investigations into the alleged waste and will consider all options, including permit reductions and/or fines of up to $10,000 per day for every day the alleged waste continued. The other letter was addressed to the TCEQ, requesting a formal inquiry concerning POSGCD's allegations regarding SAWS' use of Project Water. SAWS is investigating internally the veracity of these allegations; however, SAWS currently believes that all actions taken in this matter were consistent with prudent utility practice.

As a result of this delayed completion, as well as additional steps being taken by SAWS to ensure the compatibility of the source water with its existing infrastructure, the System is not currently taking delivery of all of the water that Vista Ridge LLC is able to make available on a daily basis. Per the terms of the Agreement, SAWS is responsible for paying for such water that has been made available but that cannot be integrated into SAWS distribution system. The volumetric amount of such water paid for but not received is accounted for, and pursuant to the terms of the Agreement will be provided to SAWS at a future date at no additional cost. The dollar amount of any such "prepaid" water purchases is recorded as a prepaid asset of the System. Current projections indicate that between April 15, 2020, and approximately mid-August 2020, SAWS will have paid for approximately 7,700 acre-feet of water that it has been unable to receive. Based on these projections, it is estimated that SAWS will have recorded a prepaid asset totaling approximately $2.9 million as of the end of August 2020. Given the priority of water deliveries and payments, it is currently estimated it will take more than two years to fully amortize this prepaid water amount.

The Vista Ridge pipeline route parallels the I-35 corridor, one of the highest growth regions in the country. Communities throughout the region have increasing water needs to sustain both growing populations and flourishing economies. While no immediate plans are in place, the Project may give the System the opportunity to wholesale up to 15,000 acre-feet per year from the Vista Ridge pipeline (or its other existing water supply projects), developing regional partnerships, providing communities a diversified water supply, and potentially reducing costs to System ratepayers.

The execution and implementation of the Agreement represents a significant diversification of the City's water source, as SAWS projects that Project Water, if delivered at the maximum amount (which is the expectation of both SAWS and Vista Ridge LLC beginning in September 2020), will account for approximately 20% of the System's current annual usage.

MEDINA LAKE AND RIVER SYSTEM

The Medina Lake & River System consists of a 950 square mile drainage area upstream of the confluence of Medio Creek, Potranco Creek, and the Medina River. The surface runoff from about two-thirds of the Medina Valley is upstream of Medina Lake. SAWS owns and leases approximately 10,000 acre-feet per year of municipal surface water rights in the Medina Lake & River System. These "run-of-river" rights have minimum downstream flow restrictions that prohibit diversions when streamflow gets below 20 cubic feet per second ("cfs").

The Bexar-Medina-Atascosa Counties Water Control and Improvement District No. 1 ("BMA") is authorized to impound up to 254,000 acre-feet of water in Medina Lake and annually divert approximately 66,000 acre-feet per year (19,974 acre-feet per year for municipal and industrial purposes and 46,000 acre-feet per year for agricultural irrigation). The most current agreement between the former Bexarmet and BMA was executed in 2007, for the lease of approximately 19,974 acre-feet per year of municipal/industrial water. SAWS assumed this agreement in January of 2012, together with other assets and liabilities of Bexarmet, pursuant to the passage of SB 341 by the 82nd Texas Legislature in 2011. This volume is in addition to the above described run-of-river rights. Under the Water Supply Agreement, SAWS is required to use the water purchased for municipal purposes within its service areas or, upon prior approval of BMA, may resell to third parties outside of its service areas for any lawful purpose. Third party sales of water diverted by SAWS outside of the San Antonio River Basin require the approval of the TCEQ. This surface water right has no minimum downstream flow restrictions.

Water from the Medina River can be diverted to a surface water treatment plant (the "Plant") located southwest of the City. The Plant is located on a 39-acre site approximately one and one quarter mile from the Medina River. The Plant is capable of treating 15.0 MGD expandable in modular form to an ultimate treatment capacity of 27.0 MGD.

During the height of the 2011-2014 drought, Medina Lake's capacity was greatly diminished, leading to poor water quality. As a result, the Plant was idled from April 2013 through August 2015. As a result of heavy rainfall during the summer of 2015, lake levels increased to a peak of nearly 80% of capacity. SAWS restarted the Plant on September 1, 2015 and treated approximately 500 acre-feet of Medina Valley water. Water quality concerns persisted, and SAWS elected to again idle the Plant in October 2015. Due to the sufficiency of SAWS' alternative sources of supply, the Plant has remained idled since 2016. Additional investments in the treatment process may be required in order to eliminate these water quality concerns in the future. Current available water supplies are expected to be sufficient to meet System customers' demand in the foreseeable future without utilizing Medina's supplies. The book value of the Plant as of December 31, 2019 was $11.7 million. SAWS is continuing to depreciate the Plant and does not currently believe the Plant has been permanently impaired.

WESTERN INTEGRATION PIPELINE

The 2012 Water Management Plan addressed the operating challenge of co-locating the Brackish Groundwater Desalination Program, Local Carrizo and ASR projects at a single site (H_2Oaks Center in southern Bexar County) by recommending the expedited construction of the Western Integration Pipeline to bring water to the western half of the City.

Construction was divided into two phases. Phase I construction commenced in 2014 and became operational in September 2016. Phase I construction consisted of 28 miles of pipeline, a high service pump station, and a ground storage tank and distribution pumps capable of delivering up to 50 million gallons per day of water from the H_2Oaks Center to the System's distribution system.

Phase II is currently scheduled to begin construction in 2020 with a total budgeted construction cost of approximately $93.4 million. Phase II consists of approximately 16 miles of pipeline, the remaining portion of the high service pump station, and a second ground storage tank and additional high service pumps to increase the total production capacity of water from the H_2Oaks Center to 75 million gallons per day.

CONSERVATION

General. SAWS recognizes that the effort to promote conservation is a cost-efficient approach at minimizing the increase in demand for water caused by population growth. Beginning in 1994, SAWS implemented progressive water conservation programs aimed at reducing the total amount of water used. These programs target both indoor and outdoor residential, commercial and industrial uses.

The City's long-standing commitment and investment in water conservation and infrastructure improvements has yielded its largest water supply. SAWS' total per capita water consumption has decreased significantly from 225 gallons per capita per day ("GPCD") in 1982 to 115 GPCD in 2018, which has resulted in approximately 3.2 million acre-feet of cumulative savings. Using today's larger population, a total per capita of 225 GPCD would require an additional 214,000 acre-feet of water per year. SAWS has successfully cultivated an ethic of conservation, invested in infrastructure over the past 35 years and effectively reduced GPCD by approximately 50 percent, all while SAWS' service area population has grown by approximately 150%.

As part of the 2017 Water Management Plan, water conservation continues to be a strategy for long-term water supply. By 2070, conservation investments are projected to result in approximately 4.3 million acre-feet of cumulative water savings since 2017, and would replace the need for approximately 132,000 acre-feet per year of new water projects.

Over the last five years, several initiatives have contributed to SAWS' progress in extending the City's water supplies through conservation and innovation:

- Over 2 million square feet of water-intensive grass has been replaced with low water-use plants or permeable patios through WaterSaver Landscape Coupon programs.
- Regional Carrizo Water Project was brought on line in 2013, providing more than 10,000 acre-feet of water in both 2015 and 2016 from the Carrizo Aquifer in Gonzales County, Texas to the City.
- In January 2017, SAWS held the grand opening of the H_2Oaks Desalination Plant and Water Center, Phase I of which is capable of producing 12 million gallons of drinking water daily from desalination operations.
- WaterSaver Irrigation Consultations providing home irrigation and landscape education visits have reduced household usage by 140 million gallons per year.
- The GardenStyleSA.com website and e-newsletter providing timely City-focused low water use landscape information to reduce outdoor watering.
- SAWS' ASR at H_2Oaks has reached a record storage volume of 143,000 acre-feet, representing over a half-year of SAWS potable demand.
- SAWS has partnered with the University of Texas at Austin-based Pecan Street to develop an integrated conservation platform to manage programs and facilitate communications with customers.
- The public-private partnership with Vista Ridge LLC for up to 50,000 acre-feet per year of groundwater from Burleson County, Texas by 2020 is recognized globally as a benchmark agreement in water projects.

- The System's 2017 Water Management Plan strives for a reduction of residential consumption to 55 GPCD by 2070 and a total consumption (to include commercial, industrial and non-revenue water) to 88 GPCD by 2070.

Strategies to Save Water. Conservation results are achieved through a combination of education and outreach, reasonable regulation and financial incentives. Education is provided through workshops and events offered directly by staff and through partnerships with expert volunteers. Over 100,000 people receive face-to-face education on how to save water through these efforts each year.

Regulations that save water are negotiated with impacted stakeholder groups to determine where it is logical to set a conservation standard for a particular activity. An example is regulations that set standards to ensure that swimming pools are designed to operate as efficiently as possible. Other regulations set efficiency standards for landscape and irrigation, power washing, decorative fountains, and car wash operations.

Financial incentives include a tiered rate structure, free conservation supplies, rebates for efficiency upgrades and coupons that offset material costs. Each incentive is designed to achieve a change in how water is used for a particular activity. The incentives are evaluated to assess the cost per gallon of water saved to ensure that they acquire water savings at a rate lower than the cost of new water. The new focus on peak water savings has resulted in procedures that place a higher financial incentive on programs that result in landscape irrigation reductions than on programs that reduce the year-round baseline use of water.

Residential Conservation Programs. Residential conservation programs encourage customers to save water and ensure that their landscape and irrigation practices are efficient. A variety of education and rebate incentive programs are available to help ratepayers understand how following best practices can save water and money. Customers learn about these programs through the System's website, public events, direct mail inserts in bills, paid advertisements, and educational materials in popular local periodicals. The System's most effective residential programs for water use reduction include the following:

Conservation Consultations provide the System's ratepayers with a free analysis of their in-ground irrigation system and landscape care needs. Trained conservation consultants visit homes to review each component of irrigation systems to determine maintenance needs to make suggestions for improving efficiency. Customers are invited to participate in the review process to get the maximum benefit from the site visit. A report that outlines any necessary maintenance repairs, suggestions for design improvements and how much water the system uses is provided to customers. The consultation visit includes suggestions and rebate incentive amounts available for making suggested design improvements. Customers are advised of ways to further reduce outdoor consumption by adjusting irrigation scheduling and by considering other landscape options.

Conservation Coupons provide instant incentive savings to customers who wish to make changes in their landscape or irrigation system. The coupons offset the upfront costs associated with transforming portions of their traditional landscape to attractive bedding areas comprised of hardy, drought-tolerant plants. The incentives require customers to replace grass with lower water use options in the same space. Coupon packages are offered several times per year and reflect seasonal plant offerings available in locally owned plant nurseries. Some coupons also offset the material costs of replacing grass by installing a patio.

Irrigation Design Rebates are designed to make an irrigation system more efficient or remove it altogether and receive a rebate to help cover the cost. During a conservation consultation, trained consultants work with local irrigators to help identify design flaws in a customer's irrigation system that, if changed, can result in water savings, healthier landscapes, and rebates.

Plumbers to People provides leak repairs and retrofits to qualified low-income homeowner customers. The System, in cooperation with the City's Department of Human Services, qualifies applicants based on the current Federal Assistance Guidelines. Only leaks that result in a loss of potable water are eligible for repair under the program. Water conservation is achieved by quickly repairing leaks that would otherwise continue due to the cost of repairs. When applicable, special analysis is prepared within low-income housing areas where high water bills and older housing stock indicate the possibility of leaks or high flow fixtures. Identified households are sent letters offering a conservation assessment. Contracted plumbers provide services that include replacement of high flow fixtures and repair of minor potable water leaks.

Garden Style San Antonio website (www.GardenStyleSA.com) is a one stop resource for inspiring designs, information on drought-hardy plants, and regional expert advice to help SAWS customers transform their landscapes into a water-saving showpiece. Launched in May 2014, the site currently has 158,000 users annually.

GardenStyleSA e-Newsletter is a weekly free newsletter provided to 16,700 individuals who want expert advice on how to take care of their landscape. It includes timely lawn irrigation advice that is based on current weather conditions. Local horticulture experts provide weekly articles on seasonal landscape care featuring plants that thrive in the City. Incentive programs and local educational events are promoted. A gardening expert (the Garden Geek) responds to regularly submitted questions.

Commercial Conservation Programs. Commercial customers account for 10 percent of the System's customer base, but represent 40 percent of the System's annual water sales; therefore, there is great potential for both water and monetary savings through the System's commercial conservation programs. The System has been working closely with commercial customers for the past 20 years to help them conserve water, maintain profitability, and become a water wise corporate partner. Water audits and case-by-case custom rebates for retrofits are also available. Every year, the System presents conservation awards to recognize businesses, organizations, and/or individuals that voluntarily initiated water conservation practices. The System's most effective programs for commercial and industrial water use reduction include the following:

Irrigation Design Rebates provide an incentive for commercial properties to upgrade older, water wasting irrigation equipment with newer options that apply water more efficiently. Rebates are available to zone irrigation areas by plant material, to convert spray irrigation to drip and to cap areas that do not require irrigation.

Commercial Custom Rebate Program allows commercial water users of all sizes to apply on a case-by-case basis for rebates to install water conserving equipment. The rebate pays for part of the costs of equipment changes based on the water projected to be saved over a ten-year period.

The program requires a pre-audit, a pre-inspection, and on-going verification of water savings and is mutually beneficial between commercial customers and SAWS. The rebate is enticing for the business as it allows water saving projects to become economically feasible while at the same time maintaining the company's market competiveness. Additionally, after the technology is installed, the business will see a decrease in overhead cost as they are using less water for the same amount of product. For SAWS, the rebate provides an investment in permanent water savings. The water saved can be used to service other customers and alleviate the pressure to pump from other water sources.

Cooling Tower Consultations help businesses manage their cooling towers as efficiently as possible. This program provides for free consultations on all cooling towers within the System's service area. A cooling tower review provides the customer with detailed advice on their specific operation, as well as recommendations for achieving water and energy savings through increased cycles of concentration, capture of blowdown water for reuse in other applications, or installation of other water conserving equipment.

Landscape & Irrigation Consultations allow conservation staff to work with irrigation and landscape professionals and with building managers to put best management practices in place as businesses are finding that irrigation consumption can account for a significant amount of their total water usage. These visits include a review of the overall site plan, the landscape maintenance plan, irrigation system quality, and irrigation scheduling. Customers are left with information on retrofits to improve efficiencies and irrigation scheduling advice. As part of the site analysis, custom rebates may be approved to encourage irrigation upgrades.

Certified WaterSaver Car Wash Program. In 1997, the Southwest Car Wash Association ("SCWA") partnered with SAWS to create the first certified car wash program, which was rejuvenated in 2007. This partnership helped to develop new standards for both existing and proposed car wash facilities within the San Antonio area, resulting in significant water savings. With direct input and cooperation from the car wash industry, the SAWS WaterSaver Car Wash Program has continued to evolve. Today's WaterSaver Car Wash Program results in real water savings, protects water quality, provides recognition and financial incentives for program participants, and works with local nonprofits seeking to earn money for worthwhile projects.

WATER QUALITY AND QUANTITY

The System's Resource Protection and Compliance Department is responsible for the System's efforts in protecting the quality of the Edwards Aquifer and, in cooperation with the System's Water Resources Department, conducting technical evaluations of how to increase its yield. The TCEQ has adopted rules relating to the activities of landowners in the recharge and drainage zones of the Edwards Aquifer. The City has adopted ordinances applicable within its City limits that limit or regulate activities, which could be harmful to water quality and has, through its Unified Development Code, regulated certain development within the City's ETJ (five miles from city limits).

Research on the Edwards Aquifer is conducted as part of the Edwards Aquifer Optimization program. This is a comprehensive program that identifies and evaluates technical options to increase available yield from the Edwards Aquifer and to attempt to use the aquifer's storage capacity more efficiently. The goal of these studies is to gain a better understanding of the hydrogeologic framework, chemical and hydraulic characteristics, and ground water flowpaths of the freshwater-saline water interface of the Edwards Aquifer. The United States Geological Survey (the "USGS") conducted a study of the San Marcos Springs hydrogeology and water balance known as the San Marcos Springs Recharge – Investigative Study. This effort encompasses scientific investigative work to refine the hydrogeologic setting, determine the hydraulic properties and groundwater flow gradient, and define local sources and flowpaths providing flow from San Marcos Springs. This study provides data for evaluation of the local versus regional sourcing of springflow, the effectiveness of current management strategies, and the need for revised management policies to maintain San Marcos Springs flow. The final Report has completed USGS editorial review and is now available on the USGS website.

SEWER MANAGEMENT PROGRAM

In March 2007, SAWS was orally notified by Region 6 of the United States Environmental Protection Agency (the "EPA") of alleged failures to comply with the Clean Water Act due to the occurrence of sanitary sewer overflows ("SSOs"). The EPA subsequently referred the matter to the United States Department of Justice (the "DOJ") for enforcement action. SAWS engaged in settlement negotiations with the EPA and the DOJ to resolve the allegations. On June 4, 2013, the Board approved a Consent Decree ("Consent Decree") between SAWS and the United States of America and the State to resolve this enforcement action. SAWS signed the Consent Decree on June 5, 2013 and the Consent Decree was subsequently executed by the United States of America and the State. On September 13, 2013, after consideration of the comments received, the United States of America filed its Motion for Entry of the Consent Decree, requesting the Court to approve the Consent Decree by signing and entering it. The Consent Decree was signed and entered by the Court on October 15, 2013. During the 10 to 12 year term of the Consent Decree, SAWS estimated the cost to perform the operating and maintenance requirements of the Consent Decree to be approximately $250 million. SAWS initially estimated that capital investments of approximately $850 million would be required over the Consent Decree term. During the last several years, through flow monitoring during significant rainfall events, physical inspection and televising, SAWS has accumulated additional information relative to the performance of its collection system. Based upon this additional information, as well as inflationary cost increases, SAWS currently estimates that capital expenditures associated with the requirements of the Consent Decree could range from $1.2 billion to $1.3 billion. As with any estimate, the actual amounts incurred could differ materially.

As SAWS moves from the planning phase of the Consent Decree to the capital phase of the Consent Decree, an increase in capital spending is expected. As mentioned above, capital requirements could range in total from $1.2 billion to $1.3 billion, with approximately $633 million being projected to be committed from 2020 to 2024. Through December 31, 2019, capital commitments related to the Consent Decree totaled approximately $672 million. Since entry into the Consent Decree, SAWS has performed its obligations under the terms of the Consent Decree and management believes SAWS is in material compliance with such terms, conditions and requirements. Since 2010, SAWS has seen a significant reduction in SSOs, from 538 in 2010 to a low of 163 in 2019. The total SSOs year to date through June 30, 2020 were 82.

The Mitchell Lake Wastewater Treatment Facility ("Mitchell Lake") is regulated pursuant to a TPDES permit issued by the TCEQ under a delegation of authority from the EPA.

Mitchell Lake is not a standard brick and mortar wastewater treatment facility. The approximately 600 acre lake is a legacy remnant of 19th century wastewater reuse and disposal practices by irrigation of adjacent croplands. Today, Mitchell Lake is operated as an Audubon Nature Center. It is a unique and environmentally sensitive wildlife refuge and an active destination attraction for ecotourists and local residents. It provides essential habitat where more than 300 species of migrating birds can rest and feed.

The lake discharges effluent to receiving streams after significant rainfall events and there are currently no treatment units or operational controls for managing effluent quality.

On August 18, 2016, SAWS received an Administrative Order from the EPA that alleged SAWS violated the TPDES permit by failing to meet effluent quality limitations as required by the permit. The Administrative Order required SAWS to submit a plan for eliminating the alleged violations. Upon receiving the Administrative Order, SAWS began working with consulting experts and conducted preliminary feasibility evaluations of a potential solution that has two major components: (a) modifications to the existing dam with the construction of a new spillway and (b) constructing treatment wetlands of approximately 115 acres below Mitchell Lake.

By letter dated February 28, 2019, EPA delivered a second Administrative Order to SAWS that includes a Schedule of Activities, which requires completion of the wetlands project by September 30, 2024. To inform the design and operation of a full-scale constructed wetlands, SAWS commenced a pilot wetlands study in 2019 of approximately 1.3 acres. Operations began in the summer of 2019 and after a one-year operation period, a final report is expected to be produced by December of 2020. On January 9, 2018, SAWS purchased a 285-acre tract of land that is anticipated to be used to implement the water quality treatment wetlands project. After assessment of the actual amount and location of acreage needed for the proposed wetlands, on June 9, 2020, the SAWS Board declared approximately 128 acres of this 285-acre tract as surplus to the needs of the System and authorized its disposition. Negotiations are ongoing for the acquisition of an additional 234-acre tract that will be necessary for the implementation of the project. On June 4, 2020, the City Council of the City of San Antonio declared this project a public necessity and authorized the use of eminent domain to facilitate timely acquisition of this 234-acre tract. At this time, projected costs for the wetlands project are estimated to be $67.5 million.

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DEBT AND OTHER FINANCIAL INFORMATION

COMBINED SYSTEM REVENUE DEBT SERVICE REQUIREMENTS[(1)]

FYE (December 31)	SAWS Current Debt Service[(1)] Senior Lien Obligations[(2)]	SAWS Current Debt Service[(1)] Junior Lien Obligations[(3)]	The Bonds Principal	The Bonds Interest	Total Projected Debt Service[(1)] Senior Lien Obligations[(2)]	Total Projected Debt Service[(1)] Junior Lien Obligations[(3)]
2020	$40,002,466	$149,368,730	-	-	$40,002,466	$149,368,730
2021	34,058,466	160,729,858	-	$8,557,041	34,058,466	169,286,899
2022	23,950,091	159,648,596	-	6,785,319	23,950,091	166,433,915
2023	23,970,216	154,655,547	-	6,785,319	23,970,216	161,440,866
2024	24,000,091	156,206,706	-	6,785,319	24,000,091	162,992,025
2025	27,615,571	154,581,164	-	6,785,319	27,615,571	161,366,483
2026	28,835,116	152,506,729	$3,555,000	6,696,444	28,835,116	162,758,173
2027	29,574,480	142,088,665	3,735,000	6,514,194	29,574,480	152,337,859
2028	28,769,834	145,802,654	3,930,000	6,322,569	28,769,834	156,055,223
2029	17,535,053	161,144,311	4,130,000	6,121,069	17,535,053	171,395,380
2030	17,529,807	156,980,728	4,340,000	5,909,319	17,529,807	167,230,047
2031	17,527,764	156,876,518	4,565,000	5,686,694	17,527,764	167,128,212
2032	17,516,829	155,454,248	4,800,000	5,452,569	17,516,829	165,706,817
2033	17,513,988	155,101,465	5,045,000	5,206,444	17,513,988	165,352,909
2034	17,513,792	187,892,175	-	5,080,319	17,513,792	192,972,494
2035	21,910,039	152,171,506	5,305,000	4,947,694	21,910,039	162,424,200
2036	21,895,347	148,600,186	5,575,000	4,675,694	21,895,347	158,850,880
2037	21,887,260	148,573,089	5,830,000	4,419,719	21,887,260	158,822,808
2038	21,874,199	137,847,914	6,070,000	4,181,719	21,874,199	148,099,633
2039	21,859,653	135,301,102	6,350,000	3,901,569	21,859,653	145,552,671
2040	15,650,452	120,530,377	6,575,000	3,672,959	15,650,452	130,778,336
2041	10,100,113	77,895,726	6,815,000	3,432,725	10,100,113	88,143,451
2042	10,098,688	76,914,355	7,095,000	3,155,925	10,098,688	87,165,280
2043	-	76,055,126	7,380,000	2,871,750	-	86,306,876
2044	-	63,754,200	7,745,000	2,507,275	-	74,006,475
2045	-	54,226,232	8,125,000	2,124,325	-	64,475,557
2046	-	46,703,686	8,530,000	1,721,950	-	56,955,636
2047	-	36,526,934	8,915,000	1,337,500	-	46,779,434
2048	-	36,533,319	9,275,000	973,700	-	46,782,019
2049	-	23,423,762	9,655,000	595,100	-	33,673,862
2050	-	11,983,428	10,050,000	201,000	-	22,234,428
	$511,189,315	$3,696,079,034	$153,390,000	$133,408,538	$511,189,315	$3,982,877,572

(1) Excludes debt service on commercial paper of the System.

(2) Takes into account refundable tax credit anticipated to be received from the United States Department of the Treasury (the "Subsidy Payment") as a result of certain Senior Lien Obligations being issued and sold as "build America bonds" under and pursuant to the American Recovery and Reinvestment Act of 2009 used to offset debt service payments on subject outstanding Senior Lien Obligations. Though used for such purpose, such amounts are not pledged to the payment of any Senior Lien Obligations. Subsidy Payments are subject to offset by the federal government. SAWS has determined that the reduced amount of Subsidy Payment to be received from the United States Treasury in relation to the aforementioned Build America Bonds as a result of the automatic reductions in federal spending effective March 1, 2013 pursuant to the Budget Deficit Control Act of 2011 (commonly referred to as "Sequestration"), and extensions thereof pursuant to the Bipartisan Budget Act of 2013 signed into law by the President on December 26, 2013, and any potential delay in the delivery of the Subsidy Payment due to limitations on IRS operations during the Pandemic, will not have a material impact on the financial condition of the System or its ability to pay regularly scheduled debt service on its outstanding obligations when and in the amounts due and owing. See "SECURITY FOR THE BONDS – Refundable Tax Credit Bonds" herein. Subsidy payments reduced by 5.9% per annum through September 30, 2020 and 5.7% thereafter through final maturity of the related Senior Lien Obligations to account for Sequestration. See "SECURITY FOR THE BONDS - Refundable Tax Credit Bonds" and "EFFECT OF SEQUESTRATION AND IRS OPERATIONS DURING THE PANDEMIC" herein for a discussion related to the current status of Sequestration and its limited effect on the City's outstanding obligations payable from SAWS revenues since certain actions have been effectuated.

(3) For purposes of illustration, interest on the San Antonio Water System Variable Rate Junior Lien Revenue and Refunding Bonds, Series 2013F (No Reserve Fund) is calculated at the actual rate of 2.00% through October 31, 2021 and an assumed rate of 3.00% thereafter, San Antonio Water System Variable Rate Junior Lien Revenue and Refunding Bonds, Series 2014B is calculated at an actual rate of 2.00% through October 31, 2022 and an assumed rate of 3.00% thereafter, and San Antonio Water System Variable Rate Junior Lien Revenue Bonds, Series 2019A is calculated at an actual rate of 2.625% through April 30, 2024 and an assumed rate of 3.00% thereafter. While such obligations accrue interest at a variable rate, actual interest paid will vary dependent on market conditions.

Interest Rate Hedge Transaction

To hedge against changes in interest expense associated with the Subordinate Lien Obligations designated as the "City of San Antonio, Texas Water System Subordinate Lien Revenue and Refunding Bonds, Series 2003-A and 2003-B" (the "2003 Subordinate Lien Obligations"), which were issued in a weekly interest reset mode, the City has entered into an agreement with JPMorgan Chase Bank, N.A., as the successor in interest to Bear Stearns Financial Products Inc. Under the agreement, the City must pay any excess monthly (and the counterparty must pay any deficit monthly) of 4.18% per annum over the Municipal Swap Index published by The Securities Industry and Financial Markets Association applied to a specified notional amount that reduces annually through the date of stated termination in May 1, 2032. The City's obligations under the agreement, both scheduled payments and termination payments (subject to the policy's terms and condition, including policy limits upon termination), are insured by MBIA Insurance Corporation ("MBIA"); the counterparty's obligations are not insured or guaranteed. In February 2009, MBIA ceded its U.S. public finance book of business (which includes the aforementioned hedge insurance policy) to subsidiary MBIA Insurance Corp. of Illinois, which has been renamed National Public Finance Guarantee Corp. The City and the counterparty may each terminate the agreement if the other party (or in some cases, its insurer) commits an event of default (including under other specified transactions and indebtedness) or certain acts of insolvency, or may not legally perform its obligations under the agreement, or merges or otherwise combines with or transfers substantially all of its assets to a materially less creditworthy entity. In that case, neither party may terminate the agreement without the consent of MBIA. The counterparty may also terminate the agreement if (i) MBIA defaults on the hedge insurance policy, (ii) MBIA fails to maintain an "A3" rating from Moody's Investors Service, Inc. ("Moody's") and an "A-" rating from S&P Global Ratings ("S&P") (the counterparty's ability to exercise the right to terminate upon the occurrence of either of (i) or (ii) requires also that an event of default occurs and is continuing with respect to the City or a termination event occurs and is continuing with respect to the City), or (iii) the ratings assigned to the Senior Lien Obligations are reduced below "A1" by Moody's or "A+" by S&P and the claims paying ability of MBIA are reduced below "A2" by Moody's or below "A" by S&P. Under certain circumstances, MBIA may exercise the parties' termination rights. If either party terminates the agreement, the City must pay to the counterparty (or the counterparty must pay to the City) the mean or median average of amounts quoted by leading dealers to be paid to or by the counterparty to enter into an economically equivalent agreement with the counterparty, regardless of whether the City or the counterparty was the defaulting party.

The City's obligations under the agreement are secured by a lien on the Net Revenues of the System on a parity with the lien securing the 2003 Subordinate Lien Obligations and other Additional Subordinate Lien Obligations, except that the lien securing any uninsured portion of the City's termination obligations is subordinate to that lien. Any amounts received by the City under the agreement will be revenues of the System. They will not be available to pay the 2003 Subordinate Lien Obligations unless Net Revenues remain after paying debt service due on the Senior Lien Obligations and the Junior Lien Obligations. The counterparty's indexed obligations under the agreement are expected to correlate closely to the City's interest obligations on the 2003 Subordinate Lien Obligations and Commercial Paper Notes so long as the credit of the credit enhancer and liquidity bank and the tax-exempt status on the 2003 Subordinate Lien Obligations and Commercial Paper Notes are maintained. If the counterparty's obligations do not correlate closely, or if the counterparty defaults in payment under the agreement, the City would be exposed to possible increases in the rate of interest on the 2003 Subordinate Lien Obligations and Commercial Paper Notes.

The System still considers the swap agreement to be a valuable variable rate management tool within its debt portfolio. Accordingly, the System negotiated amendments to the swap agreement, effective June 16, 2009, with JPMorgan Chase Bank, N.A. and MBIA to amend the swap agreement to allow the remaining 2003 Subordinate Lien Obligations outstanding to be redeemed with Commercial Paper Notes, while maintaining the swap agreement as an existing obligation to all parties. These amendments provide for the conditional release of MBIA's swap insurance policy upon the occurrence of certain future events. The System redeemed the remaining 2003 Subordinate Lien Obligations on June 24, 2009 with Commercial Paper Notes. See "COMMERCIAL PAPER NOTE PROGRAM" herein. No such 2003 Subordinate Lien Obligations are currently outstanding; $73,060,000 in Commercial Paper Notes used to redeem 2003 Subordinate Lien Obligations are currently outstanding.

If the swap agreement is terminated, the City could be obligated to make a substantial payment to the counterparty, depending on market conditions. As of June 30, 2020, the termination payment that the City would be liable for if the swap agreement were terminated on such date would be $19.9 million (unaudited and unverified). Prospective investors should be aware that the value of the termination payments varies day to day and that such valuation herein provided represents an unaudited and unverified estimate provided to SAWS by JPMorgan Chase Bank, N.A., as the swap counterparty. For more information concerning the swap agreement, see "APPENDIX B – EXCERPTS FROM THE SAN ANTONIO WATER SYSTEM COMPREHENSIVE ANNUAL FINANCIAL REPORT", Note G. The City may also enter into other interest rate hedging transactions payable from System revenues in the future, with comparable risks, although no such transactions are currently contemplated.

Pension Funds

The System's retirement program includes benefits provided by Texas Municipal Retirement System ("TMRS"), a State-wide multi-employer public retirement plan, and the San Antonio Water System Retirement Plan ("SAWSRP"), which serves as a supplement to TMRS. SAWSRP is a single-employer plan administered by the Principal Financial Group. SAWSRP has a defined benefit component covering employees hired prior to June 1, 2014 and a defined contribution component covering employees hired on or after June 1, 2014. The System makes annual contributions to TMRS and the defined benefit component of the SAWSRP equal to the actuarially determined contribution amounts. The System makes contributions to separate retirement accounts for eligible employees participating in the defined contribution component of the SAWSRP in accordance with the provisions of the plan, which currently require a System contribution equal to four percent of eligible employees' compensation.

The System is also the plan sponsor of the District Special Project Retirement Income Pension Trust Fund ("Retirement Income Plan") which is a single-employer defined benefit pension plan that covers eligible former employees of the former BexarMet. In 2008, the Retirement Income Plan was frozen for both future benefit accruals and new entrants to the plan. Annual contributions to the Retirement Income Plan are based on the actuarially determined contribution amounts.

Based on the most recent, unaudited actuarial evaluation, the cumulative net pension liability for these three plans total $82.0 million as of the valuations dated either December 31, 2018 or January 1, 2019. This represents a funded ratio of 82.7%. These plans' liability amounts are based upon assumed discount rates of 6.50% for the SAWSRP and Retirement Income Plan and 6.75% for TMRS.

For further information with respect to the System's audited Pension liabilities, please refer to Note J and the Required Supplemental Information of the System's Annual Financial Report for the year ended December 31, 2019. (See "APPENDIX B - EXCERPTS FROM THE SAN ANTONIO WATER SYSTEM COMPREHENSIVE ANNUAL FINANCIAL REPORT".)

OTHER POSTEMPLOYMENT BENEFITS ("OPEB")

The System provides certain postretirement medical and life insurance benefits to qualified employees, their spouses, and other dependents through a single-employer defined benefit plan administered by the System. The authority to establish and amend the OPEB provisions is vested in the System's Board.

By State law, any employee that retires under either the TMRS or SAWSRP is eligible, at the time of retirement, to obtain health insurance benefits similar to those offered to active SAWS employees. Contributions made by retirees for health insurance benefits vary based on retirement date, years of service and the health care options selected. Retirees may also purchase coverage for their spouse at group rates partially subsidized by SAWS. Beginning January 1, 2015, retirees age 65 or older participate in a fully-insured Medicare Advantage healthcare plan sponsored by the System.

Based on the latest unaudited actuarial valuation dated January 1, 2019, the net OPEB liability for this plan was $78.7 million and the annual required contribution was $10.4 million. Prior to 2012, the System funded all obligations arising under these plans on a pay-as-you-go basis. In March 2012, SAWS established an OPEB Trust for the exclusive purpose of providing benefits to eligible retirees and their dependents. During 2019, the System made contributions to the OPEB Trust of $6.3 million in addition to funding the pay-as-you-go costs of $7.8 million. Going forward, the System expects to make annual contributions to the OPEB Trust in accordance with a plan that results in reducing the unfunded actuarial accrued liability over a period of time.

For further information with respect to the System's audited OPEB liabilities, please refer to Note K and the Required Supplemental Information of the System's Annual Financial Report for the year ended December 31, 2019. (See "APPENDIX B - EXCERPTS FROM THE SAN ANTONIO WATER SYSTEM COMPREHENSIVE ANNUAL FINANCIAL REPORT".)

CAPITAL IMPROVEMENT PROGRAM

The following is a proposed five-year CIP for the System. It is the intention of the System to fund the program with long-term bonds, tax-exempt commercial paper, impact fees, and excess System revenues. The System contemplates the following summary of capital improvement projects during calendar year 2020:

- $22.4 million is budgeted for the wastewater treatment program to repair/replace/upgrade treatment facilities and provide capacity for future growth;
- $11.3 million is budgeted for the wastewater collection program to fix deteriorated components of the collection system and provide capacity for future growth;
- $297.4 million is budgeted to replace sewer and water mains;
- $51.6 million is budgeted for the governmental replacement and relocation programs;
- $16.0 million is budgeted to construct new or fix deteriorated components of the production facilities; and
- $93.4 million is budgeted for water transmission projects for new sources of water.

The capital improvement projections in the following table were prepared by the System staff.

Capital Improvement Projections(1)
Fiscal Year Ended December 31,

	2020	2021	2022	2023	2024	Total
Water Supply	$100,174,361	$ 60,536,396	$ 40,635,988	$ 63,980,080	$ 41,701,545	$ 307,028,370
Water Delivery	94,770,086	144,525,275	160,238,637	174,182,779	224,539,412	798,256,189
Wastewater	412,676,097	318,910,824	268,099,742	237,796,061	282,976,746	1,520,459,470
Chilled Water	1,255,800	125,000	125,000	125,000	125,000	1,755,800
Total Annual Requirements	$608,876,344	$524,097,495	$469,099,367	$476,083,920	$549,342,702	$2,627,499,828

(1) Preliminary , subject to change. See "THE SAN ANTONIO WATER SYSTEM – Sewer Management Program" herein for additional information regarding wastewater capital improvement projections.

PROJECT FUNDING APPROACH

The table on the following page was prepared by the System staff based upon information and assumptions it deems reasonable, and shows the projected financing sources to meet the projected capital needs.

Projected Funding Sources*
Fiscal Year Ended December 31,

	2020	2021	2022	2023	2024	Total
Revenues	$215,486,216	$151,246,285	$ 87,428,354	$120,208,446	$116,053,885	$ 690,423,186
Impact Fees	89,000,000	115,000,000	70,000,000	72,000,000	65,000,000	411,000,000
Debt Proceeds	304,390,128	257,851,210	311,671,013	283,875,474	368,288,817	1,526,076,642
Total	$608,876,344	$524,097,495	$469,099,367	$476,083,920	$549,342,702	$2,627,499,828

* Preliminary, subject to change.

FINANCIAL POLICIES

Basis of Accounting. The financial statements are prepared using the accrual basis of accounting. Under this method, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

Debt Service Fund Balance. The System maintains the parity lien Debt Service Fund and the Reserve Fund, as applicable, in accordance with the ordinances authorizing the currently outstanding Senior Lien Obligations and Junior Lien Obligations, respectively.

Budgetary Procedures. The System prepares and presents, 60 days prior to the beginning of each fiscal year, an annual budget prepared on an accrual basis to serve as a tool in controlling and administering the management and operation of the System. The annual budget reflects an estimate of Gross Revenues and an estimate of the disposition of these revenues in accordance with the flow of funds required by Ordinance No. 75686. The annual budget is submitted to City Council for review and consultation. Encumbrances are not formally recorded in the accounting system but are monitored and disclosed if significant amounts are outstanding at year end. Outstanding encumbrances lapse at year end and must be reappropriated in the following year.

INVESTMENT INFORMATION

Available investable funds of the System, acting on behalf of the City, are invested as authorized and required by the Texas Public Funds Investment Act, Chapter 2256, Texas Government Code, as amended (the "Investment Act"), and in accordance with an Investment Policy approved by the Board of the System. The Investment Act requires that the System establish an investment policy to ensure that City funds are invested only in accordance with State law. The most recent update to the investment policy was adopted on November 5, 2019. The System's investments are managed by its Senior Vice President/Chief Financial Officer, Treasurer, and the Manager-Treasury, who, in accordance with the Investment Policy, reports investment activity to the Board.

Legal Investments. Under Texas law, the City is authorized to invest in (1) obligations, including letters of credit, of the United States or its agencies and instrumentalities, (2) direct obligations of the State of Texas or its agencies and instrumentalities, (3) collateralized mortgage obligations directly issued by a federal agency or instrumentality of the United States, the underlying security for which is guaranteed by an agency or instrumentality of the United States, (4) other obligations, the principal and interest of which are unconditionally guaranteed or insured by, or backed by the full faith and credit of the State of Texas or the United States or their respective agencies and instrumentalities, including obligations that are fully guaranteed or insured by the Federal Deposit Insurance Corporation or by the explicit full faith and credit of the United States, (5) obligations of states, agencies, counties, cities, and other political subdivisions of any state rated as to investment quality by a nationally recognized investment rating firm not less than "A" or its equivalent, (6) (a) certificates of deposit and share certificates issued by a depository institution that has its main office or branch office in the State of Texas, that are guaranteed or insured by the Federal Deposit Insurance Corporation or the National Credit Union Share Insurance Fund or their respective successors, or are secured as to principal by obligations described in clauses (1) through (5) and clause (13) or in any other manner and amount provided by law for System deposits, and in addition (b) the System is authorized, subject to certain conditions, to invest in certificates of deposit with a depository institution that has its main office or branch office in the State of Texas and that participates in the Certificate of Deposit Account Registry Service® network ("CDARS®") and as further provided by Texas law, (7) fully collateralized repurchase agreements that have a defined termination date, are fully secured by a combination of cash and obligations described in clause (1), commercial paper or corporate bonds and require the security being purchased by the City or cash held by the City to be pledged to the City, held in the City's name and deposited at the time the investment is made with the City or with a third party selected and approved by the City, and are placed through a primary government securities dealer or a financial institution doing business in the State of Texas, (8) bankers' acceptances with the remaining term of 365 days or less from the date of issuance, if the short-term obligations of the accepting bank or its parent are rated at least "A-1" or "P-1" or the equivalent by at least one nationally recognized credit rating agency, (9) commercial paper with the remaining term of 365 days or less from the date of issuance that is rated at least "A-1" or "P-1" or the equivalent by at least (a) two nationally recognized credit rating agencies or (b) one nationally recognized credit rating agency if the paper is fully secured by an irrevocable letter of credit issued by a U.S. or state bank, (10) no-load money market mutual funds registered with and regulated by the United States Securities and Exchange Commission (the "SEC") that comply with federal SEC Rule 2a-7, (11) no-load mutual fund registered with the SEC that: have an average weighted maturity of less than two years; and either has a duration of one year or more and is invested exclusively in securities authorized by the Investment Act, or has a duration of less than one year and the investment portfolio is limited to investment grade securities, excluding asset-backed securities, (12) public funds investment pools that have an advisory board which includes participants in the pool and are continuously rated as to investment quality by at least one nationally recognized investment rating firm of not less than "AAA" or "AAA-m" or its equivalent, (13) interest-bearing banking deposits that are guaranteed or insured by the Federal Deposit Insurance Corporation or its successor or the National Credit Union Share Insurance Fund or its successor, and (14) bonds issued, assumed or guaranteed by the State of Israel. Texas law also permits the City to invest bond proceeds in a guaranteed investment contract subject to the limitations set forth in the Investment Act.

Entities such as the City may enter into securities lending programs if (i) the securities loaned under the program are 100% collateralized including accrued income, a loan made under the program allows for termination at any time and a loan made under the program is either secured by (a) obligations that are described in clauses (1) through (5) and clause (14) above, (b) pledged irrevocable letters of credit issued by a state or national bank that is continuously rated by a nationally recognized investment rating firm at not less than "A" or its equivalent or (c) cash invested in obligations described in clauses (1) through (5) and clause (14) above, clause (9) above and clauses (10) and (11) above, or an authorized investment pool; (ii) securities held as collateral under a loan are pledged to such investing entity or a third party designated by such investing entity; (iii) a loan made under the program is placed through either a primary government securities dealer or a financial institution doing business in the State of Texas; and (iv) the agreement to lend securities has a term of one year or less.

The System may invest in such obligations directly or through government investment pools that invest solely in such obligations provided that the pool are rated no lower than "AAA" or "AAA-m" or an equivalent by at least one nationally recognized rating service. The System is specifically prohibited from investing in (1) obligations whose payment represents the coupon payments on the outstanding principal balance of the underlying mortgage-backed security collateral and pays no principal; (2) obligations whose payment represents the principal stream of cash flow from the underlying mortgage-backed security and bears no interest; (3) collateralized mortgage obligations that have a stated final maturity of greater than 10 years; and (4) collateralized mortgage obligations the interest rate of which is determined by an index that adjusts opposite to the changes in a market index.

Investment Policies. Under Texas law, the System is required to invest its funds in accordance with written investment policies that primarily emphasize safety of principal and liquidity; that address investment diversification, yield, maturity, and the quality and capability of investment management; that includes a list of authorized investments for System funds, maximum allowable stated maturity of any individual investment, the maximum average dollar-weighted maturity allowed for pool fund groups, and the methods to monitor the market price of investments acquired with public funds and the requirement for settlement of all transactions, except investment pool funds and mutual funds, on a delivery versus payment basis and procedures to monitor rating changes in investments acquired with public funds and the liquidation of such investments. All System funds must be invested consistent with a formally adopted "Investment Strategy Statement" that specifically addresses each fund's investment. Each Investment Strategy Statement will describe its objectives concerning: (1) suitability of investment type; (2) preservation and safety of principal; (3) liquidity; (4) marketability of each investment; (5) diversification of the portfolio; and (6) yield.

Under Texas law, System investments must be made "with judgment and care, under prevailing circumstances, that a person of prudence, discretion, and intelligence would exercise in the management of the person's own affairs, not for speculation, but for investment, considering the probable safety of capital and the probable income to be derived". At least quarterly the investment officers of the System must submit to the Board an investment report detailing (1) the investment position of the System; (2) that all investment officers jointly prepared and signed the report; (3) the beginning market value, the fully accrued interest, and the ending value of each pooled fund group; (4) the book value and market value of each separately listed asset at the end of the reporting period; (5) the maturity date of each separately invested asset; (6) the account or fund or pooled fund group for which each individual investment was acquired; and (7) the compliance of the investment portfolio as it relates to (a) adopted investment strategy statements and (b) State law. No person may invest System funds without express written authority from the Board.

Additional Provisions. Under Texas law, the System is additionally required to (1) annually review its adopted policies and strategies; (2) adopt an order or resolution stating that it has reviewed its investment policy and investment strategies and records any changes made to either its investment policy or investment strategy in the said order or resolution; (3) require any investment officers with personal business relationships or relative with firms seeking to sell securities to the entity to disclose the relationship and file a statement with the Texas Ethics Commission and the Board; (4) require the registered principal of firms seeking to sell securities to the System to (a) receive and review the System's investment policy; (b) acknowledge that reasonable controls and procedures have been implemented to preclude imprudent investment activities; and (c) deliver a written statement attesting to these requirements; (5) perform an annual audit of the management controls on investments and adherence to the System's investment policy; (6) provide specific investment training for the Chief Financial Officer and investment officers; (7) restrict reverse repurchase agreements to not more than 90 days and restrict the investments of reverse repurchase agreement funds to no greater than the term of the reverse repurchase agreement; (8) restrict the investment in mutual funds in the aggregate to no more than 15% of the System's monthly average fund balance, excluding bond proceeds and reserves and other funds held for debt service and further restrict the investment in no-load money market mutual funds of any portion of bond proceeds, reserves and funds held for debt service and to no more than 15% of the entity's monthly average fund balance, excluding bond proceeds and reserves and other funds held for debt service; (9) require local government investment pools to conform to the new disclosure, rating, net asset value, yield calculation, and advisory board requirements; and (10) at least annually review, revise, and adopt a list of qualified brokers that are authorized to engage in the investment transactions with the System.

Current Investments. At June 30, 2020, investable System funds were 35.70% invested in obligations of the United States, or its agencies and instrumentalities, 6.84% invested in money market funds, 48.20% invested in investment pools, and 9.20% invested in municipal securities, with the balance in demand/savings accounts and cash on hand. The investments and maturity terms are consistent with State law, and SAWS' investment policy, which objectives are to preserve principal, limit risk, maintain diversification and liquidity, and to maximize interest earnings.

The market value of such investments (as determined by SAWS by reference to published quotations, dealer bids, and comparable information) was approximately 100.65% of their book value, with 75.63% of the System's investments maturing in less than one year. No funds of SAWS are invested in derivative securities; i.e., securities whose rate of return is determined by reference to some other instrument, index, or commodity.

As of June 30, 2020, the System funds were invested in the following categories (data presented is unaudited):

	Percentages	Carrying Amount[1]	Market Value
Money Market Deposits	6.84%	$ 70,193,858	$ 70,193,858
U.S. Treasury Notes	9.38%	96,344,159	98,055,160
U.S. Agency Notes	23.28%	239,053,329	242,085,658
Investment Pools	48.20%	494,803,776	494,803,776
Municipal Bonds	9.20%	94,433,802	95,920,168
Collateralized Mortgage Obligations	3.03%	31,138,518	31,595,398
Demand and Savings	0.06%	650,814	650,814
Cash on Hand	0.00%	27,070	27,070
Total	100.00%	$ 1,026,645,325	$ 1,033,331,902

(1) At amortized cost.

SAWS STATISTICAL SECTION AND MANAGEMENT DISCUSSION

The following Statistical Section (including certain historical financial information presented in this Official Statement in table format was derived from SAWS' internal financial records and the presentation format itself was not audited) is included in SAWS' Annual Financial Report for the year ended December 31, 2019, which is available in its entirety at www.saws.org/who_we_are/Financial_Reports/CAFR. SAWS follows GASB Statement No. 34, which requires the preparation of a Management's Discussion and Analysis ("MD&A") in connection with the annual financial report of SAWS. Reference is hereby made to APPENDIX B for the MD&A pertaining to the SAWS fiscal year ended December 31, 2019. Certain interim financial reports are made available periodically by SAWS to the general public and are accessible at http://www.saws.org.

The operating results of the System reflect the results of past operations and are not necessarily indicative of results of operations for any future period. Future operations will be affected by factors relating to changes in rates, operating costs, water, wastewater, and other industry regulation, environmental regulation, economic growth of the community, population, weather, and other matters the nature and effect of which cannot at present be determined. See "FORWARD-LOOKING STATEMENTS" and "INFECTIOUS DISEASE OUTBREAK – COVID – 19" herein.

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San Antonio Water System
Schedule 1 - Net Position
(accrual basis of accounting)
(amounts in thousands)

	2019	2018	2017	2016	2015[(a)]	2014	2013	2012	2011	2010
Net Position:										
Net investment in capital assets	$2,758,354	$2,353,841	$2,217,283	$2,106,957	$1,939,292	$1,730,265	$1,661,644	$1,602,507	$1,496,132	$1,451,222
Restricted for operating reserve	58,408	56,642	54,143	52,279	45,801	43,385	40,656	38,389	35,227	33,955
Restricted for debt service	67,380	64,086	59,719	60,396	56,775	47,123	39,710	34,254	34,862	31,222
Restricted for debt service reserve	23,122	54,702	56,364	56,016	62,716	66,665	62,560	58,681	54,696	50,688
Restricted for construction	163,313	209,204	188,227	150,198	168,968	140,937	101,212	83,968	98,455	98,555
Unrestricted	359,938	367,220	278,542	187,503	126,352	137,207	118,285	116,179	120,363	113,419
Total Net Position	$3,430,515	$3,105,695	$2,854,278	$2,613,349	$2,399,904	$2,165,582	$ 2,024,067	$ 1,933,978	$ 1,839,735	$ 1,779,061

(a) Increase in amounts from 2014 to 2015 is partially due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.

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San Antonio Water System
Schedule 2 - Change in Net Position
(accrual basis of accounting)
(amounts in thousands)

	2019	2018	2017	2016	2015[(a)]	2014	2013	2012	2011	2010
Operating Revenues										
Water delivery	$229,203	$218,399	$202,264	$190,913	$168,338	$127,708	$119,767	$121,078	$125,188	$106,864
Water Supply	218,842	202,674	202,143	185,037	163,759	150,079	134,367	136,704	130,755	117,402
Wastewater	274,519	259,124	250,977	234,966	213,833	210,704	195,584	168,368	150,520	132,408
Chilled water & steam	10,615	10,849	11,368	11,541	11,102	11,152	12,621	12,378	11,631	12,223
	733,179	691,046	666,752	622,457	557,032	499,643	462,339	438,528	418,094	368,897
Operating expenses before depreciation:										
Salaries and fringe benefits	162,445	149,970	148,058	142,315	133,681	115,049	125,210	125,295	127,816	121,523
Contractual services	173,187	171,032	168,350	170,845	163,768	127,685	107,194	100,165	66,900	82,708
Materials and supplies	26,469	23,485	23,159	21,959	23,490	20,930	23,355	23,966	24,868	20,320
Other charges	6,726	11,718	11,150	12,702	8,129	12,355	20,423	21,790	21,756	36,883
Less: Costs capitalized to Construction in Progress	(30,743)	(31,612)	(32,275)	(32,426)	(37,822)	(30,964)	(31,834)	(33,640)	(32,282)	(34,945)
Internal Service Fund – net (gain)/loss		-	-	-	-	-	-	-	-	-
Operating expense before depreciation	338,084	324,593	318,442	315,395	291,246	245,055	244,348	237,576	209,058	226,489
Depreciation	157,225	155,549	152,072	142,856	141,259	123,111	111,375	103,034	98,374	107,761
Total operating expenses	495,309	480,142	470,514	458,251	432,505	368,166	355,723	340,610	307,432	334,250
Operating Income	237,870	210,904	196,238	164,206	124,527	131,477	106,616	97,918	110,662	34,647
Non-operating revenues:										
Interest and miscellaneous	32,583	22,488	10,407	8,146	6,079	5,792	5,410	6,149	5,955	3,625
Non-operating expenses:										
Interest Expense	96,420	88,542	86,615	86,566	89,971	78,049	75,606	73,987	77,022	76,805
Amortization of debt insurance costs	2,627	1,711	1,385	4,716	3,831	2,914	4,112	3,835	2,346	2,081
Other finance charges	2,066	1,957	2,697	2,121	2,041	2,726	2,361	2,934	2,881	2,936
Loss on defeased debt	664	-	-	-	-	-	-	-	-	-
(Gain)/Loss on sale of capital assets	(886)	(924)	(951)	(3,087)	(4,674)	(23)	(1,075)	(430)	(773)	(392)
Payments to City of San Antonio	21,917	18,287	17,276	14,228	12,683	13,089	11,528	11,161	10,926	9,565
Payments to other entities	99	101	108	109	106	114	130	122	124	124
Total non-operating expense	122,907	109,674	107,130	104,653	103,958	96,869	92,662	91,609	92,526	91,119
Special Items	-	-	-	-	-	-	-	-	-	-
Increases (decreases) in net position, before capital contributions	147,549	123,718	99,515	67,699	26,648	40,400	19,364	12,458	24,091	(52,847)
Capital contributions										
Plant Contributions	73,375	59,761	60,643	73,889	71,967	49,081	32,891	44,787	23,263	27,162
Capital Recovery Fees	94,641	79,794	72,846	67,991	64,056	51,973	37,289	36,761	35,872	25,038
Grant Revenue	9,258	6,435	7,925	3,866	-	61	545	237	345	1,100
Total contributions	177,274	145,990	141,414	145,746	136,023	101,115	70,725	81,785	59,480	53,300
Change in net position	$324,820	$269,708	$240,929	$213,445	$162,671	$141,515	$ 90,089	$ 94,243	$ 83,571	$ 453

(a) Increase in amounts from 2014 to 2015 is partially due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.

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San Antonio Water System
Schedule 3 – Net Position in System
(accrual basis of accounting)
(amounts in thousands)

	2019	2018	2017	2016	2015[(a)]	2014	2013	2012	2011	2010
Assets:										
Capital Assets, net of accumulated depreciation	$5,649,427	$5,266,084	$5,051,777	$4,886,091	$4,647,786	$4,089,478	$3,964,000	$3,771,228	$3,553,065	$3,362,867
Cash and Investments	949,290	1,025,791	924,958	928,593	853,417	819,232	689,483	517,876	528,761	575,629
Other Assets	89,319	83,770	87,530	80,976	81,889	79,478	75,998	71,241	63,658	75,578
Total Assets	6,688,034	6,375,645	6,064,265	5,895,660	5,583,092	4,988,188	4,729,481	4,360,345	4,145,484	4,014,074
Deferred Outflows of Resources										
Deferred Charge on Bond Refunding	35,076	42,048	48,055	54,317	30,103	29,086	30,943	30,561	2,494	-
Deferred outflows-pension	60,446	33,411	33,428	28,115	16,083	-	-	-	-	-
Deferred outflows-asset retirement	32,354	32,511	-	-	-	-	-	-	-	-
Accumulated Decrease in Fair Value of Hedging Derivatives	12,256	9,332	11,857	12,965	16,394	15,520	8,372	19,746	18,380	5,575
Total Deferred Outflows of Resources	140,132	117,302	93,340	95,397	62,580	44,606	39,315	50,307	20,874	5,575
Liabilities:										
Revenue Bonds Payable (net)	2,735,075	2,834,570	2,735,739	2,840,282	2,730,363	2,507,419	2,348,834	2,083,545	1,898,839	1,832,523
Commercial Paper Notes	281,815	215,695	278,060	241,610	224,005	138,550	186,655	170,745	214,930	244,650
Other Liabilities	367,967	313,140	287,200	293,023	284,617	221,243	209,240	222,384	212,854	163,415
Total Liabilities	3,384,857	3,363,405	3,300,999	3,374,915	3,238,985	2,867,212	2,744,729	2,476,674	2,326,623	2,240,588
Deferred Inflows of Resources										
Deferred inflows - pension	12,794	23,847	2,328	2,793	6,783	-	-	-	-	-
Net Position in System	$3,430,515	$3,105,695	$2,854,278	$2,613,349	$2,399,904	$2,165,582	$2,024,067	$1,933,978	$1,839,735	$1,779,061
Percentage Net Position in System	50.2%	47.8%	46.4%	43.6%	42.5%	43.0%	42.4%	43.8%	44.2%	44.3%

(a) Increase in amounts from 2014 to 2015 is partially due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.

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San Antonio Water System

Schedule 4 - Water Production, Water Usage, and Wastewater Treated
(gallons in millions)
Unaudited

Fiscal Year	Gallons of Water Production[a]	Gallons of Water Usage	Gallons of Water Unbilled	Average Percent Unbilled	Gallons of Wastewater Treated[b]	Total Direct Rate			
						Water		Sewer	
						Base Rate[c]	Usage Rate[d]	Base Rate[e]	Usage Rate[f]
2019	80,271	65,655	14,616	18.21%	50,142	$13.02	$23.92	$14.59	$17.11
2018	78,665	63,660	15,005	19.07%	50,775	12.97	23.34	13.51	15.84
2017	79,256	65,318	13,938	17.59%	50,945	11.82	22.09	13.04	15.29
2016	76,857	63,394	12,923	16.81%	49,282	10.90	21.18	12.35	14.48
2015[g]	76,227	62,896	13,331	17.49%	48,563	7.75	19.73	12.75	14.04
2014	68,265	57,261	11,004	16.12%	50,689	7.49	18.98	11.99	13.20
2013	66,391	55,108	11,283	16.99%	50,076	7.31	17.81	11.54	12.71
2012	66,596	55,320	11,276	16.93%	49,055	7.31	17.95	9.92	10.91
2011	70,699	59,133	11,566	16.36%	49,918	7.10	15.72	8.73	9.60
2010	61,272	52,578	8,694	14.19%	48,151	7.10	18.73	8.73	8.58

(a) Pumpage is total potable water production less Aquifer Storage and Recovery recharge.
(b) Represents amounts billed to customers. Residential Class customers are billed based on water usage during a consecutive three month billing period from November through March. All other customer classes are billed for wastewater treatment based on actual water usage during each monthly billing period.
(c) Rate shown is for 5/8" meters. See Schedule 8 for the rates of other meter sizes. See Schedule 14 for additional information.
(d) Represents standard (non-seasonal) usage charge for monthly residential water usage of 7,092 gallons per month. Includes water supply and EAA fees.
(e) Minimum service availability charge (includes charge for first 1,496 gallons). Includes the State-imposed TCEQ fee.
(f) Represents usage charge for a residential customer based on winter average water consumption of 5,668 gallons per month.
(g) Increase in water produced and used from 2014 to 2015 is partially due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.

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San Antonio Water System
Schedule 5 - Sales by Source
(accrual basis of accounting)
(amounts in thousands)
Unaudited

	2019	2018	2017	2016	2015[a]	2014	2013	2012	2011	2010
Water Sales:										
Residential Class	$127,488	$123,006	$113,070	$100,982	$95,068	$74,062	$71,536	$72,620	$79,332	$66,410
General Class	69,326	67,412	60,977	63,781	56,041	37,878	35,099	35,504	33,571	32,326
Wholesale Class	808	744	801	767	432	3,233	1,640	1,255	234	136
Irrigation Class	26,631	21,304	21,915	20,239	13,113	11,011	10,893	11,164	11,722	12,909
Total Water	224,253	212,466	196,763	185,769	164,654	126,184	119,168	120,543	124,859	111,781
Water Supply Fees										
Residential Class	92,932	86,003	85,809	73,518	60,067	48,270	43,121	44,163	51,696	45,312
General Class	53,620	50,086	47,129	42,748	44,746	39,355	32,393	32,537	31,586	29,764
Wholesale Class	887	790	874	865	588	7,196	3,227	2,294	202	158
Irrigation Class	19,475	15,122	16,571	15,437	14,491	12,551	12,057	12,058	13,029	7,154
Total Water Supply Fees	166,914	152,001	150,383	132,568	119,892	107,372	90,798	91,052	96,513	82,388
EAA Pass-through fees[b]										
Residential Class	12,996	12,526	13,108	14,110	10,915	9,654	9,905	10,841	4,767	5,423
General Class	9,013	8,687	8,865	9,606	7,380	6,874	6,991	7,352	2,930	3,648
Wholesale Class	124	119	123	157	114	1,271	659	509	18	19
Irrigation Class	1,288	1,241	1,434	1,639	1,136	1,061	1,134	1,242	540	765
Total Pass-through fees	23,421	22,573	23,530	25,512	19,545	18,860	18,689	19,944	8,255	9,855
Conservation Fees:										
Residential Class	2,747	2,644	2,727	2,189	2,246	1,956	2,454	2,986	3,682	2,814
General Class	4,570	4,871	5,071	5,078	3,941	3,760	4,396	4,713	4,218	4,193
Irrigation Class	4,827	4,119	3,274	3,375	3,063	2,738	2,270	2,401	2,580	277
Total Conservation	12,144	11,634	11,072	10,642	9,250	8,454	9,060	10,026	10,384	7,275
Wastewater Sales:										
Residential Class	153,273	146,684	142,530	134,860	124,992	125,051	116,775	98,674	88,702	79,118
General Class	101,247	92,427	88,551	80,696	71,267	68,371	62,300	54,175	48,271	41,768
Wholesale Class	11,706	10,659	9,936	8,729	8,064	7,848	7,599	6,761	6,105	5,044
Surcharge	6,370	6,245	6,056	6,292	5,401	5,450	5,438	5,134	4,815	4,861
Total Wastewater	272,596	256,015	247,073	230,577	209,724	206,720	192,112	164,744	147,893	130,791
TCEQ Pass-through fees[c]										
Water customers	1,743	1,683	1,420	1,460	1,412	1,169	1,086	1,064	1,178	964
Wastewater customers	481	465	435	448	429	433	347	411	464	280
	2,224	2,148	1,855	1,908	1,841	1,602	1,433	1,475	1,642	1,244
Recycled Water Sales	6,094	5,568	5,651	5,691	5,097	5,086	5,161	5,074	5,068	3,955
Stormwater Fees	5,223	5,221	5,209	4,967	4,797	4,420	5,058	4,558	4,158	3,745
Chilled Water & Steam[d]	10,615	10,849	11,368	11,548	11,184	11,251	12,719	12,485	11,715	12,337
Miscellaneous Fees and Charges	15,545	17,415	17,709	17,634	16,769	13,860	12,787	12,427	10,418	8,989
Provision for Uncollectible Accounts	(5,849)	(4,844)	(3,860)	(4,359)	(5,721)	(4,166)	(4,646)	(3,800)	(2,811)	(3,463)
Total Operating Revenue	$733,179	$691,046	$666,752	$622,457	$557,032	$499,643	$462,339	$438,528	$418,094	$368,897

(a) Increase in water related revenues from 2014 to 2015 is partially due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.
(b) EAA pass-through fees are designed to recoup fees charged by the EAA. The fee is charged based on water usage. Any previous over or under recovery of fees is considered in determining the fees to be charged each year.
(c) TCEQ pass-through fees are designed to recoup fees charged by the TCEQ. Fee is a per customer charge.
(d) Steam service was discontinued in June 2014.

San Antonio Water System
Schedule 6 - Sales in Gallons
(gallons billed, in millions)
Unaudited

	2019	2018	2017	2016	2015[(a)]	2014	2013	2012	2011	2010
Water Sales:[(b)]										
Residential Class	36,084	35,325	36,566	35,360	35,769	29,310	29,206	30,070	34,153	28,932
General Class	25,011	24,498	24,408	24,074	23,212	20,870	20,614	20,393	20,986	19,465
Wholesale Class	352	337	344	393	354	3,861	1,943	1,412	128	101
Irrigation Class	4,208	3,500	4,000	4,107	3,561	3,220	3,345	3,445	3,866	4,080
Total Water	65,655	63,660	65,318	63,934	62,896	57,261	55,108	55,320	59,133	52,578
Wastewater Sales:										
Residential Class	25,263	26,318	26,809	26,462	26,048	27,896	27,617	26,572	27,371	26,746
General Class	22,393	21,873	21,654	20,503	20,281	20,502	20,100	20,066	20,134	20,002
Wholesale Class	2,486	2,584	2,482	2,317	2,234	2,291	2,359	2,417	2,413	1,404
Total Wastewater	50,142	50,775	50,945	49,282	48,563	50,689	50,076	49,055	49,918	48,152
Conservation - Residential Class[(c)(d)(e)]	9,189	8,658	9,572	6,611	2,284	2,296	2,520	3,026	4,106	2,935
Recycled Water Sales	18,208	18,346	18,949	18,436	18,421	18,323	18,359	18,129	18,990	14,968

(a) Increase in water usage from 2014 to 2015 is primarily due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.
(b) Water Supply and EAA fees are billed based on the gallons billed for water sales.
(c) Gallons billed for conservation are included in the gallons billed for water sales.
(d) As part of a rate restructuring which took place on January 1, 2016, a portion of all monthly residential water sales in excess of 7,482 gallons is allowed to fund conservation related programs. Prior to 2016, this allocation was limited to monthly sales in excess of 17,205 gallons.
(e) Effective January 1, 2017, former District Special Project customers began paying for water service under the SAWS rate structure. As a result, a portion of the revenues from those customers was included in the revenue allocated to conservation. The increase in the gallons subject to the conservation allocation from 2016 to 2017 reflects this change.

San Antonio Water System
Schedule 7 - Number of Customer Connections
(average number billed)
Unaudited

	2019	2018	2017	2016	2015[(a)]	2014	2013	2012	2011	2010
Water Sales:[(b)]										
Residential Class	481,994	473,333	465,241	457,485	450,725	347,789	343,667	339,204	335,280	331,853
General Class	29,358	28,682	28,518	29,155	28,366	23,777	23,713	23,582	23,369	23,225
Wholesale Class	9	9	9	9	9	7	8	8	7	7
Total Water	511,361	502,024	493,768	486,649	479,100	371,573	367,388	362,794	358,656	355,085
Irrigation Class[(c)]	10,676	10,465	10,260	9,291	9,829	8,966	8,821	8,633	8,479	8,350
Wastewater Sales:										
Residential Class	431,695	424,127	416,996	409,988	402,409	395,574	390,256	383,553	378,380	373,755
General Class	25,911	25,754	25,544	25,352	25,175	25,079	25,021	24,824	24,550	24,407
Wholesale Class	12	12	12	12	12	12	12	12	12	12
Total Wastewater	457,618	449,893	442,552	435,352	427,596	420,665	415,289	408,389	402,942	398,174
Conservation - Residential Class[(d)(e)]	113,152	149,940	159,994	83,991	18,539	20,716	20,867	23,804	33,708	21,791
Recycled Water Sales	123	116	112	107	109	102	97	92	80	81

(a) Increase in water usage from 2014 to 2015 is primarily due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.
(b) Water Supply and EAA fees are billed to water customers with water usage.
(c) Represents the number of customers included in Residential, General, and Wholesale Classes which also have irrigation meters.
(d) As part of a rate restructuring which took place on January 1, 2016, a portion of all monthly residential water sales in excess of 7,482 gallons is allowed to fund conservation related programs. Prior to 2016, this allocation was limited to monthly sales in excess of 17,205 gallons.
(e) Effective January 1, 2017, former District Special Project customers began paying for water service under the SAWS rate structure. As a result, a portion of the revenues from those customers was included in the revenue allocated to conservation. The increase in the gallons subject to the conservation allocation from 2016 to 2017 reflects this change.

San Antonio Water System
Schedule 8 - Residential Class Rates (Inside City Limits)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Water										
Service Availability Charge by meter size:										
5/8”	$12.82	$12.77	$11.64	$10.72	$7.57	$7.31	$7.14	$7.14	$6.91	$6.91
3/4”	16.97	16.90	15.41	14.19	10.63	10.26	10.01	10.01	9.68	9.68
1”	25.22	25.12	22.90	21.09	16.72	16.14	15.75	15.75	15.23	15.23
1-1/2”	45.85	45.67	41.63	38.33	31.94	30.83	30.09	30.09	29.10	29.10
2”	70.58	70.30	64.08	59.01	50.18	48.44	47.28	47.28	45.73	45.73
3”	128.34	127.83	116.53	107.30	92.80	89.58	87.44	87.44	84.56	84.56
4”	210.83	209.99	191.42	176.26	153.67	148.33	144.78	144.78	140.02	140.02
6”	417.07	415.41	378.67	348.68	305.86	295.23	288.17	288.17	278.69	278.69
8”	664.55	661.90	603.37	555.59	488.47	471.50	460.22	460.22	445.09	445.09
10”	953.27	949.47	865.51	796.97	701.52	677.14	660.95	660.95	639.22	639.22
12”	1,778.20	1,771.12	1,614.51	1,486.66	1,310.24	1,264.71	1,234.47	1,234.47	1,193.88	1,193.88
Reduction applied if usage is less than 2,993 gallons:	(2.55)	(2.55)	(2.32)	(2.14)						
Usage *(per 100 gallons)*										
First 2,992 Gallons	0.0740	0.0737	0.0672	0.0619						
Next 1,497 Gallons	0.1295	0.1290	0.1176	0.1083						
Next 1,496 Gallons	0.1665	0.1658	0.1511	0.1391						
Next 1,496 Gallons	0.2034	0.2026	0.1847	0.1701						
Next 2,992 Gallons	0.2405	0.2395	0.2183	0.2010						
Next 4,489 Gallons	0.2775	0.2764	0.2520	0.2320						
Next 5,237 Gallons	0.3329	0.3316	0.3023	0.2784						
Over 20,199 Gallons	0.4809	0.4790	0.4366	0.4020						
Standard:										
First 5,985 gallons					0.1006	0.0971	0.0948	0.0948	0.0917	0.0917
Next 6,732 gallons					0.1457	0.1406	0.1372	0.1372	0.1327	0.1327
Next 4,488 gallons					0.2053	0.1982	0.1935	0.1935	0.1871	0.1871
Over 17,205 gallons					0.3596	0.3471	0.3388	0.3388	0.3277	0.3277
Seasonal:[(a)]										
First 5,985 gallons					0.1006	0.0971	0.0948	0.0948	0.0917	0.0917
Next 6,732 gallons					0.1584	0.1529	0.1492	0.1492	0.1443	0.1443
Next 4,488 gallons					0.2355	0.2273	0.2219	0.2219	0.2146	0.2146
Over 17,205 gallons					0.4880	0.4710	0.4597	0.4597	0.4446	0.4446
Sewer										
Service Availability Charge by meter size[(b)]										
5/8”	$14.53	$13.45	$12.98	$12.29	$12.69	$11.93	$11.49	$9.86	$8.68	$8.68
3/4”	15.97	14.79	14.28	13.52	12.69	11.93	11.49	9.86	8.68	8.68
1”	18.14	16.80	16.22	15.36	12.69	11.93	11.49	9.86	8.68	8.68
1-1/2”	25.41	23.53	22.71	21.51	12.69	11.93	11.49	9.86	8.68	8.68
2”	36.31	33.62	32.45	30.73	12.69	11.93	11.49	9.86	8.68	8.68
3”	72.61	67.23	64.89	61.45	12.69	11.93	11.49	9.86	8.68	8.68
4”	108.91	100.84	97.34	92.18	12.69	11.93	11.49	9.86	8.68	8.68
6”	181.52	168.07	162.23	153.63	12.69	11.93	11.49	9.86	8.68	8.68
8”	290.41	268.90	259.56	245.80	12.69	11.93	11.49	9.86	8.68	8.68
10”	435.65	403.38	389.36	368.71	12.69	11.93	11.49	9.86	8.68	8.68
12”	580.86	537.83	519.14	491.61	12.69	11.93	11.49	9.86	8.68	8.68
Usage per 100 gallons[(c)]										
1,497 gallons – 2,992 gallons	0.3104	0.2874	0.2774	0.2627						
Over 2,992 gallons	0.4657	0.4312	0.4162	0.3941						
All gallons in excess of 1,496					0.3365	0.3163	0.3047	0.2615	0.2302	0.2302

(a) Prior to 2016, Seasonal rate was applied to all billings beginning May 1 and ending on or about September 30 of each year. At all other times, the Standard rate was applied.
(b) Includes the first 1,496 gallons.
(c) Residential sewer charges are computed on the basis of average winter usage for 90 days during three consecutive billing periods beginning after November 15 and ending on or before March 15 of each year.

San Antonio Water System
Schedule 9 - Residential Class Rates (Outside City Limits)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Water										
Service Availability Charge by meter size:										
5/8”	$16.67	$16.60	$15.14	$13.94	$9.86	$9.52	$9.29	$9.29	$8.98	$8.98
3/4”	22.06	21.97	20.03	18.44	13.82	13.34	13.02	13.02	12.59	12.59
1”	32.79	32.66	29.78	27.42	21.72	20.97	20.47	20.47	19.80	19.80
1-1/2”	59.61	59.37	54.12	49.83	41.52	40.08	39.12	39.12	37.83	37.83
2”	91.75	91.38	83.30	76.70	65.26	62.99	61.48	61.48	59.46	59.46
3”	166.84	166.18	151.49	139.49	120.66	116.47	113.68	113.68	109.94	109.94
4”	274.06	272.97	248.84	229.13	199.78	192.84	188.23	188.23	182.04	182.04
6”	542.18	540.02	492.27	453.29	397.62	383.80	374.62	374.62	362.30	362.30
8”	863.89	860.45	784.37	722.26	635.03	612.96	598.30	598.30	578.63	578.63
10”	1,239.24	1,234.30	1,125.16	1,036.06	911.98	880.29	859.24	859.24	830.99	830.99
12”	2,311.67	2,302.46	2,098.87	1,932.66	1,703.33	1,644.14	1,604.82	1,604.82	1,552.05	1,552.05
Reduction applied if usage is less than 2,993 gallons:	(3.34)	(3.32)	(3.03)	(2.79)						
Usage *(per 100 gallons)*										
First 2,992 Gallons	0.0962	0.0958	0.0873	0.0804						
Next 1,497 Gallons	0.1683	0.1676	0.1528	0.1407						
Next 1,496 Gallons	0.2165	0.2156	0.1965	0.1809						
Next 1,496 Gallons	0.2645	0.2634	0.2401	0.2211						
Next 2,992 Gallons	0.3125	0.3113	0.2838	0.2613						
Next 4,489 Gallons	0.3607	0.3593	0.3275	0.3016						
Next 5,237 Gallons	0.4328	0.4311	0.3930	0.3619						
Over 20,199 Gallons	0.6253	0.6228	0.5677	0.5227						
Standard:										
First 5,985 gallons					0.1310	0.1264	0.1234	0.1234	0.1193	0.1193
Next 6,732 gallons					0.1894	0.1828	0.1784	0.1784	0.1725	0.1725
Next 4,488 gallons					0.2671	0.2578	0.2516	0.2516	0.2433	0.2433
Over 17,205 gallons					0.4675	0.4513	0.4405	0.4405	0.4260	0.4260
Seasonal:[(a)]										
First 5,985 gallons					0.1310	0.1264	0.1234	0.1234	0.1193	0.1193
Next 6,732 gallons					0.2060	0.1988	0.1940	0.1940	0.1876	0.1876
Next 4,488 gallons					0.3062	0.2956	0.2885	0.2885	0.2790	0.2790
Over 17,205 gallons					0.6341	0.6121	0.5975	0.5975	0.5779	0.5779
Sewer										
Service Availability Charge by meter size[(b)]										
5/8”	$17.43	$16.14	$15.58	$14.75	$15.25	$14.33	$13.81	$11.85	$10.43	$10.43
3/4”	19.18	17.76	17.14	16.23	15.25	14.33	13.81	11.85	10.43	10.43
1”	21.78	20.17	19.47	18.44	15.25	14.33	13.81	11.85	10.43	10.43
1-1/2”	30.50	28.24	27.26	25.81	15.25	14.33	13.81	11.85	10.43	10.43
2”	43.58	40.35	38.95	36.88	15.25	14.33	13.81	11.85	10.43	10.43
3”	87.12	80.67	77.87	73.74	15.25	14.33	13.81	11.85	10.43	10.43
4”	130.70	121.02	116.81	110.62	15.25	14.33	13.81	11.85	10.43	10.43
6”	217.83	201.69	194.68	184.36	15.25	14.33	13.81	11.85	10.43	10.43
8”	348.52	322.70	311.49	294.97	15.25	14.33	13.81	11.85	10.43	10.43
10”	522.77	484.05	467.23	442.45	15.25	14.33	13.81	11.85	10.43	10.43
12”	697.03	645.40	622.97	589.93	15.25	14.33	13.81	11.85	10.43	10.43
Usage per 100 gallons[(c)]										
1,497 gallons - 2,992 gallons	0.3726	0.3450	0.3330	0.3153	0.4038	0.3795	0.3656	0.3138	0.2762	0.2762
Over 2,992 Gallons	0.5588	0.5174	0.4994	0.4729	0.4038	0.3795	0.3656	0.3138	0.2762	0.2762

(a) Prior to 2016, Seasonal rate was applied to all billings beginning May 1 and ending on or about September 30 of each year. At all other times, the Standard rate was applied.
(b) Includes the first 1,496 gallons.
(c) Per 100 gallons. Residential sewer usage charges are computed on the basis of average winter usage for 90 days during three consecutive billings periods beginning after November 15 and ending on or before March 15 of each year.

San Antonio Water System
Schedule 10 - General Class Rates (Inside City Limits)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Water										
Service Availability Charge by meter size:										
5/8”	$13.86	$13.80	$12.58	$11.58	$10.53	$10.16	$9.92	$9.92	$9.59	$9.59
3/4”	19.79	19.71	17.97	16.55	15.05	14.53	14.18	14.18	13.71	13.71
1”	31.66	31.53	28.74	26.46	24.08	23.24	22.68	22.68	21.93	21.93
1-1/2”	61.29	61.05	55.65	51.24	46.65	45.03	43.95	43.95	42.50	42.50
2”	96.79	96.40	87.88	80.92	73.74	71.18	69.48	69.48	67.20	67.20
3”	179.74	179.02	163.19	150.27	136.96	132.20	129.04	129.04	124.80	124.80
4”	298.19	297.00	270.74	249.30	227.28	219.38	214.13	214.13	207.09	207.09
6”	594.32	591.95	539.61	496.88	453.06	437.32	426.86	426.86	412.82	412.82
8”	949.73	945.95	862.31	794.02	723.99	698.83	682.12	682.12	659.69	659.69
10”	1,364.34	1,358.90	1,238.74	1,140.64	1,040.08	1,003.94	979.93	979.93	947.71	947.71
12”	2,548.96	2,538.80	2,314.31	2,131.04	1,943.21	1,875.69	1,830.83	1,830.83	1,770.63	1,770.63
Usage *(per 100 gallons)*										
Base[(a)]	0.1810	0.1803	0.1644	0.1514	0.1218	0.1176	0.1148	0.1148	0.1110	0.1110
100-125% of base	0.2084	0.2076	0.1892	0.1742	0.1457	0.1406	0.1372	0.1372	0.1327	0.1327
125-150% of base	0.2717	0.2706	0.2467	0.2272	0.2042	0.1971	0.1924	0.1924	0.1861	0.1861
Over 175% of base	0.3171	0.3158	0.2879	0.2651	0.2991	0.2887	0.2818	0.2818	0.2725	0.2725
Sewer										
Service Availability Charge by Meter Size[(b)]										
5/8”										
3/4”	$14.53	$13.45	$12.98	$12.29	$12.69	$11.93	$11.49	$9.86	$8.68	$8.68
1”	15.97	14.79	14.28	13.52	12.69	11.93	11.49	9.86	8.68	8.68
1-1/2”	18.14	16.80	16.22	15.36	12.69	11.93	11.49	9.86	8.68	8.68
2”	25.41	23.53	22.71	21.51	12.69	11.93	11.49	9.86	8.68	8.68
3”	36.31	33.62	32.45	30.73	12.69	11.93	11.49	9.86	8.68	8.68
4”	72.61	67.23	64.89	61.45	12.69	11.93	11.49	9.86	8.68	8.68
6”	108.91	100.84	97.34	92.18	12.69	11.93	11.49	9.86	8.68	8.68
8”	181.52	168.07	162.23	153.63	12.69	11.93	11.49	9.86	8.68	8.68
10”	290.41	268.90	259.56	245.80	12.69	11.93	11.49	9.86	8.68	8.68
12”	435.65	403.38	389.36	368.71	12.69	11.93	11.49	9.86	8.68	8.68
	580.86	537.83	519.14	491.61	12.69	11.93	11.49	9.86	8.68	8.68
Usage *(per 100 gallons)*										
All gallons in excess of 1,496	0.4159	0.3851	0.3717	0.3520	0.3365	0.3163	0.3047	0.2615	0.2302	0.2302

(a) Since 2010, base has been defined as 100% of the previous year’s annual usage divided by 12.
(b) Includes the first 1,496 gallons.

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San Antonio Water System
Schedule 11 - General Class Rates (Outside City Limits)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Water										
Service Availability Charge by meter size:										
5/8”	$16.94	$16.87	$15.38	$14.16	$13.69	$13.21	$12.89	$12.89	$12.47	$12.47
3/4”	24.12	24.02	21.90	20.17	19.56	18.88	18.43	18.43	17.82	17.82
1”	38.45	38.30	34.91	32.15	31.29	30.20	29.48	29.48	28.51	28.51
1-1/2”	74.27	73.97	67.43	62.09	60.65	58.54	57.14	57.14	55.26	55.26
2”	117.20	116.73	106.41	97.98	95.87	92.54	90.33	90.33	87.36	87.36
3”	217.47	216.60	197.45	181.81	178.06	171.87	167.76	167.76	162.24	162.24
4”	360.65	359.21	327.45	301.52	295.46	285.19	278.37	278.37	269.22	269.22
6”	718.67	715.81	652.52	600.85	588.98	568.51	554.91	554.91	536.66	536.66
8”	1,148.31	1,143.74	1,042.61	960.05	941.20	908.49	886.76	886.76	857.60	857.60
10”	1,649.54	1,642.97	1,497.69	1,379.09	1,352.11	1,305.13	1,273.92	1,273.92	1,232.03	1,232.03
12”	3,081.65	3,069.37	2,797.97	2,576.40	2,526.17	2,438.39	2,380.08	2,380.08	2,301.82	2,301.82
Usage *(per 100 gallons)*										
Base[(a)]	0.2354	0.2345	0.2138	0.1969	0.1584	0.1529	0.1492	0.1492	0.1443	0.1443
100-125% of base	0.2710	0.2699	0.2460	0.2265	0.1893	0.1827	0.1783	0.1783	0.1724	0.1724
125-150% of base	0.3533	0.3519	0.3208	0.2954	0.2654	0.2562	0.2501	0.2501	0.2419	0.2419
Over 175% of base	0.4121	0.4105	0.3742	0.3446	0.3887	0.3752	0.3662	0.3662	0.3542	0.3542
Sewer										
Service Availability Charge by Meter Size[(b)]										
5/8”	$17.43	$16.14	$15.58	$14.75	$15.25	$14.33	$13.81	$11.85	$10.43	$10.43
3/4”	19.18	17.76	17.14	16.23	15.25	14.33	13.81	11.85	10.43	10.43
1”	21.78	20.17	19.47	18.44	15.25	14.33	13.81	11.85	10.43	10.43
1-1/2”	30.50	28.24	27.26	25.81	15.25	14.33	13.81	11.85	10.43	10.43
2”	43.58	40.35	38.95	36.88	15.25	14.33	13.81	11.85	10.43	10.43
3”	87.12	80.67	77.87	73.74	15.25	14.33	13.81	11.85	10.43	10.43
4”	130.70	121.02	116.81	110.62	15.25	14.33	13.81	11.85	10.43	10.43
6”	217.83	201.69	194.68	184.36	15.25	14.33	13.81	11.85	10.43	10.43
8”	348.52	322.70	311.49	294.97	15.25	14.33	13.81	11.85	10.43	10.43
10”	522.77	484.05	467.23	442.45	15.25	14.33	13.81	11.85	10.43	10.43
12”	697.03	645.40	622.97	589.93	15.25	14.33	13.81	11.85	10.43	10.43
Usage *(per 100 gallons)*										
All gallons in excess of 1,496	0.4992	0.4622	0.4461	0.4224	0.4038	0.3795	0.3656	0.3138	0.2762	0.2762

(a) Since 2010, base has been defined as 100% of the previous year’s annual usage divided by 12.
(b) Includes the first 1,496 gallons.

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San Antonio Water System
Schedule 12 - Wholesale Class Rates

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Water										
Service Availability Charge by meter size:										
6”	$538.85	$536.70	$489.24	$450.50	$397.62	$383.80	$374.62	$374.62	$362.30	$362.30
8”	860.58	857.15	781.36	719.48	635.03	612.96	598.30	598.30	578.63	578.63
10”	1,235.91	1,230.99	1,122.14	1,033.28	911.98	880.29	859.24	859.24	830.99	830.99
12”	2,308.35	2,299.15	2,095.85	1,929.88	1,703.33	1,644.14	1,604.82	1,604.82	1,552.05	1,552.05
Usage *(per 100 gallons)*										
Base[(a)]	0.2099	0.2091	0.1906	0.1755						
Over base	0.6299	0.6274	0.5719	0.5266						
Usage *(per 100 gallons)*										
Base[(a)]					0.1098	0.1060	0.1035	0.1035	0.1001	0.1001
100-125% of base					0.1650	0.1593	0.1555	0.1555	0.1504	0.1504
125-175% of base					0.2383	0.2300	0.2245	0.2245	0.2171	0.2171
Over 175% of base					0.3369	0.3252	0.3174	0.3174	0.3070	0.3070
Sewer										
Service Availability Charge	340.07	314.88	303.94	287.82	149.02	140.06	134.93	115.82	101.95	101.95
Usage *(per 100 gallons)*	0.4438	0.4109	0.3966	0.3756	0.3641	0.3422	0.3297	0.2830	0.2491	0.2491

(a) Base is defined as 100% of the previous year’s average annual usage divided by twelve or (effective June 18, 2015) as agreed to by the wholesale customer and approved by the SAWS Board.

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San Antonio Water System
Schedule 13 - Irrigation Class Rates

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Inside City Limits										
Service Availability Charge by meter size:										
5/8”	$13.86	$13.80	$12.58	$11.58	$10.53	$10.16	$9.92	$9.92	$9.59	$9.59
3/4”	19.79	19.71	17.97	16.55	15.05	14.53	14.18	14.18	13.71	13.71
1”	31.66	31.53	28.74	26.46	24.08	23.24	22.68	22.68	21.93	21.93
1-1/2”	61.29	61.05	55.65	51.24	46.65	45.03	43.95	43.95	42.50	42.50
2”	96.79	96.40	87.88	80.92	73.74	71.18	69.48	69.48	67.20	67.20
3”	179.74	179.02	163.19	150.27	136.96	132.20	129.04	129.04	124.80	124.80
4”	298.19	297.00	270.74	249.30	227.28	219.38	214.13	214.13	207.09	207.09
6”	594.32	591.95	539.61	496.88	453.06	437.32	426.86	426.86	412.82	412.82
8”	949.73	945.95	862.31	794.02	723.99	698.83	682.12	682.12	659.69	659.69
10”	1,364.34	1,358.90	1,238.74	1,140.64	1,040.08	1,003.94	979.93	979.93	947.71	947.71
12”	2,548.96	2,538.80	2,314.31	2,131.04	1,943.21	1,875.69	1,830.83	1,830.83	1,770.63	1,770.63
Usage *(per 100 gallons)*										
First 8,229 gallons	0.3292	0.3279	0.2989	0.2752						
Next 9,725 gallons	0.4607	0.4589	0.4183	0.3852						
Next 144,362 gallons	0.5925	0.5901	0.5379	0.4953						
Over 163,316 gallons	0.7570	0.7540	0.6873	0.6329						
Standard:										
First 6,732 gallons					0.1713	0.1653	0.1613	0.1613	0.1560	0.1560
Next 10,473 gallons					0.2053	0.1982	0.1935	0.1935	0.1871	0.1871
Over 17,205 gallons					0.3596	0.3471	0.3388	0.3388	0.3277	0.3277
Seasonal:[(a)]										
First 6,732 gallons					0.1713	0.1653	0.1613	0.1613	0.1560	0.1560
Next 10,473 gallons					0.2384	0.2301	0.2246	0.2246	0.2172	0.2172
Over 17,205 gallons					0.4936	0.4764	0.4650	0.4650	0.4497	0.4497
Outside City Limits										
Service Availability Charge by meter size:										
5/8”	16.94	16.87	15.38	14.16	13.69	13.21	12.89	12.89	12.47	12.47
3/4”	24.12	24.02	21.90	20.17	19.56	18.88	18.43	18.43	17.82	17.82
1”	38.45	38.30	34.91	32.15	31.29	30.20	29.48	29.48	28.51	28.51
1-1/2”	74.27	73.97	67.43	62.09	60.65	58.54	57.14	57.14	55.26	55.26
2”	117.20	116.73	106.41	97.98	95.87	92.54	90.33	90.33	87.36	87.36
3”	217.47	216.60	197.45	181.81	178.06	171.87	167.76	167.76	162.24	162.24
4”	360.65	359.21	327.45	301.52	295.46	285.19	278.37	278.37	269.22	269.22
6”	718.67	715.81	652.52	600.85	588.98	568.51	554.91	554.91	536.66	536.66
8”	1,148.31	1,143.74	1,042.61	960.05	941.20	908.49	886.76	886.76	857.60	857.60
10”	1,649.54	1,642.97	1,497.69	1,379.09	1,352.11	1,305.13	1,273.92	1,273.92	1,232.03	1,232.03
12”	3,081.65	3,069.37	2,797.97	2,576.40	2,526.17	2,438.39	2,380.08	2,380.08	2,301.82	2,301.82
Usage *(per 100 gallons)*										
First 8,229 gallons	0.4279	0.4262	0.3885	0.3577						
Next 9,725 gallons	0.5991	0.5967	0.5439	0.5008						
Next 144,362 gallons	0.7702	0.7671	0.6993	0.6439						
Over 163,316 gallons	0.9841	0.9802	0.8935	0.8227						
Standard:										
First 6,732 gallons					0.2225	0.2148	0.2097	0.2097	0.2028	0.2028
Next 10,473 gallons					0.2670	0.2577	0.2515	0.2515	0.2432	0.2432
Over 17,205 gallons					0.4675	0.4513	0.4405	0.4405	0.4260	0.4260
Seasonal:[(a)]										
First 6,732 gallons					0.2225	0.2148	0.2097	0.2097	0.2028	0.2028
Next 10,473 gallons					0.3100	0.2992	0.2920	0.2920	0.2824	0.2824
Over 17,205 gallons					0.6416	0.6193	0.6045	0.6045	0.5846	0.5846

(a) Seasonal rate was applied to all billings beginning May 1 and ended on or about September 30 of each year. At all other times, the Standard rate was applied.

San Antonio Water System
Schedule 14 - Other Fees

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Water Supply Fees[a]:										
Usage (*per 100 gallons*)										
Residential Class										
First 2,992 gallons	$0.1040	$0.0997	$0.0954	$0.0892						
Next 1,497 gallons	0.1819	0.1744	0.1669	0.1561						
Next 1,496 gallons	0.2338	0.2242	0.2145	0.2007						
Next 1,496 gallons	0.2859	0.2741	0.2623	0.2454						
Next 2,992 gallons	0.3379	0.3240	0.3100	0.2900						
Next 4,489 gallons	0.3899	0.3738	0.3577	0.3346						
Next 5,237 gallons	0.4678	0.4485	0.4292	0.4015						
Over 20,199 gallons	0.6756	0.6477	0.6198	0.5798						
First 5,985 gallons					$0.1285	$0.1223	$0.1080	$0.1054	$0.1023	$0.1023
Next 6,732 gallons					0.1858	0.1768	0.1562	0.1524	0.1480	0.1480
Next 4,488 gallons					0.2622	0.2495	0.2204	0.2150	0.2087	0.2087
Over 17,205 gallons					0.4589	0.4366	0.3857	0.3763	0.3653	0.3653
General Class										
Base[b]	0.1961	0.1880	0.1799	0.1683	0.1976	0.1880	0.1661	0.1620	0.1573	0.1573
100-125% of base	0.2256	0.2163	0.2070	0.1936	0.1976	0.1880	0.1661	0.1620	0.1573	0.1573
125-175% of base	0.2941	0.2820	0.2699	0.2525	0.1976	0.1880	0.1661	0.1620	0.1573	0.1573
Over 175% of base	0.3433	0.3291	0.3149	0.2946	0.1976	0.1880	0.1661	0.1620	0.1573	0.1573
Wholesale Class										
Base[c]	0.2554	0.2449	0.2344	0.2193	0.1976	0.1880	0.1661	0.1620	0.1573	0.1573
Over base	0.7665	0.7349	0.7033	0.6579	0.1976	0.1880	0.1661	0.1620	0.1573	0.1573
Irrigation Class										
First 8,229 gallons	0.2566	0.2460	0.2354	0.2202						
Next 9,725 gallons	0.3592	0.3444	0.3296	0.3083						
Next 144,362 gallons	0.4619	0.4429	0.4238	0.3964						
Over 162,316 gallons	0.5903	0.5660	0.5416	0.5066						
First 6,732 gallons					0.1976	0.1880	0.1661	0.1620	0.1573	0.1573
Next 10,473 gallons					0.2622	0.2495	0.2204	0.2150	0.2087	0.2087
Over 17,205 gallons					0.4976	0.4735	0.4183	0.4081	0.3962	0.3962
EAA Fee[d]	0.0356	0.0353	0.0361	0.0426	0.0331	0.0330	0.0343	0.0390	0.0141	0.0184
State-Imposed TCEQ Fees[e]										
Water Connection Fee	0.20	0.20	0.18	0.18	0.18	0.18	0.17	0.17	0.19	0.19
Wastewater Connection Fee	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05

(a) Applies to all billed potable water.
(b) Base is defined as 100% of the previous average annual usage divided by twelve.
(c) Base is defined as 100% of the previous average annual usage or (effective June 18, 2015) as agreed to by the wholesale customer and approved by the Board.
(d) Per 100 gallons. Applies to all billed potable water. Purpose of fee is to recover fees paid to EAA for permitted water rights. Annual rate takes into account any cumulative deficit or surplus in the recovery, number of EAA water rights, and projected water sales (in gallons) for the year.
(e) Purpose is to recover fees paid to TCEQ. Each fee is assessed monthly to all Residential, General, and Wholesale accounts as well as each apartment account based on the number of units. Annual rate takes into account any cumulative deficit or surplus in the recovery.

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San Antonio Water System
Schedule 15 - Recycled Water Rates

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Edwards Exchange Customers[a]										
Service Availability Charge by meter size:										
5/8"	$12.34	$12.12	$11.24	$10.42	$9.51	$9.26	$9.04	$9.04	$8.74	$8.74
3/4"	16.05	15.77	14.63	13.56	12.37	12.05	11.76	11.76	11.37	11.37
1"	20.92	20.55	19.06	17.66	16.11	15.69	15.31	15.31	14.81	14.81
1-1/2"	33.24	32.65	30.29	28.07	25.61	24.95	24.35	24.35	23.55	23.55
2"	48.60	47.74	44.29	41.05	37.45	36.48	35.61	35.61	34.44	34.44
3"	129.27	126.98	117.79	109.17	99.61	97.03	94.71	94.71	91.60	91.60
4"	192.15	188.75	175.09	162.27	148.06	144.22	140.77	140.77	136.14	136.14
6"	366.53	360.05	334.00	309.55	282.44	275.12	268.54	268.54	259.71	259.71
8"	552.50	542.73	503.46	466.60	425.73	414.70	404.78	404.78	391.47	391.47
10"	757.60	744.20	690.35	639.81	583.77	568.64	555.04	555.04	536.79	536.79
12"	934.75	918.22	851.78	789.42	720.27	701.61	684.83	684.83	662.31	662.31
Usage *(per 100 gallons)*										
Standard:										
Transferred amount	0.0325	0.0319	0.0296	0.0274	0.0250	0.0244	0.0238	0.0238	0.0230	0.0230
In excess of transferred amount	0.1218	0.1196	0.1109	0.1028	0.0938	0.0914	0.0892	0.0892	0.0863	0.0863
Seasonal:[b]										
Transferred amount	0.0325	0.0319	0.0296	0.0274	0.0250	0.0244	0.0238	0.0238	0.0230	0.0230
In excess of transferred amount	0.1294	0.1271	0.1179	0.1093	0.0997	0.0971	0.0948	0.0948	0.0917	0.0917
Non-exchange Customers										
Service Availability Charge by meter size:										
5/8"	12.34	12.12	11.24	10.42	9.51	9.26	9.04	9.04	8.74	8.74
3/4"	16.05	15.77	14.63	13.56	12.37	12.05	11.76	11.76	11.37	11.37
1"	20.92	20.55	19.06	17.66	16.11	15.69	15.31	15.31	14.81	14.81
1-1/2"	33.24	32.65	30.29	28.07	25.61	24.95	24.35	24.35	23.55	23.55
2"	48.60	47.74	44.29	41.05	37.45	36.48	35.61	35.61	34.44	34.44
3"	129.27	126.98	117.79	109.17	99.61	97.03	94.71	94.71	91.60	91.60
4"	192.15	188.75	175.09	162.27	148.06	144.22	140.77	140.77	136.14	136.14
6"	366.53	360.05	334.00	309.55	282.44	275.12	268.54	268.54	259.71	259.71
8"	552.50	542.73	503.46	466.60	425.73	414.70	404.78	404.78	391.47	391.47
10"	757.60	744.20	690.35	639.81	583.77	568.64	555.04	555.04	536.79	536.79
12"	934.75	918.22	851.78	789.42	720.27	701.61	684.83	684.83	662.31	662.31
Usage *(per 100 gallons)*										
Standard:										
First 748,000 gallons	0.1303	0.1280	0.1187	0.1100	0.1004	0.0978	0.0955	0.0955	0.0924	0.0924
Over 748,000 gallons	0.1332	0.1308	0.1213	0.1124	0.1026	0.0999	0.0975	0.0975	0.0943	0.0943
Seasonal:[b]										
First 748,000 gallons	0.1401	0.1376	0.1276	0.1183	0.1079	0.1051	0.1026	0.1026	0.0992	0.0992
Over 748,000 gallons	0.1413	0.1388	0.1288	0.1194	0.1089	0.1061	0.1036	0.1036	0.1002	0.1002

(a) Customers that have transferred Edwards Aquifer water rights to the System in exchange for recycled water.
(b) Prior to 2012, rate was applied to all billings beginning July 1 and ending on or about October 31 of each year. At all other times, the Standard rate was utilized. Beginning in 2012, rate is applied to all billings beginning May 1 and ending on or about September 30 of each year. At all other times, the Standard rate is utilized.

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San Antonio Water System
Schedule 16 - Impact Fees

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Water										
Flow – All Areas	$1,188.00	$1,182.00	$1,182.00	$1,182.00	$1,182.00	$1,182.00	$1,247.00	$1,247.00	$1,247.00	$1,098.00
System Development:										
Low Elevation Service Area	855.00	619.00	619.00	619.00	619.00	619.00	579.00	579.00	579.00	668.00
Middle Elevation Service Area	1,014.00	799.00	799.00	799.00	799.00	799.00	774.00	774.00	774.00	591.00
High Elevation Service Area	1,203.00	883.00	883.00	883.00	883.00	883.00	966.00	966.00	966.00	1,356.00
Wastewater										
Treatment:										
Dos Rios/Leon Creek Service Area	651.00	786.00	786.00	786.00	786.00	786.00	552.00	552.00	552.00	
Medio Creek	1,222.00	1,429.00	1,429.00	1,429.00	1,429.00	1,429.00	1,379.00	1,379.00	1,379.00	
Upper and Lower Service Area										453.00
Far West-Medio Service Areas										901.00
Collection:										
Medio Creek	861.00	838.00	838.00	838.00	838.00	838.00	582.00	582.00	582.00	
Upper Medina	1,422.00	1,565.00	1,565.00	1,565.00	1,565.00	1,565.00	1,053.00	1,053.00	1,053.00	
Lower Medina	520.00	475.00	475.00	475.00	475.00	475.00	594.00	594.00	594.00	
Upper Collection	2,800.00	2,520.00	2,520.00	2,520.00	2,520.00	2,520.00	1,795.00	1,795.00	1,795.00	
Middle Collection	2,013.00	1,469.00	1,469.00	1,469.00	1,469.00	1,469.00	1,142.00	1,142.00	1,142.00	
Lower Collection	902.00	719.00	719.00	719.00	719.00	719.00	552.00	552.00	552.00	
Lower Service Area										413.00
Upper Service Area										691.00
Far West – Medio Service Area										394.00
Far West – Potranco, Big Sous, & Lucas Service Area										772.00
Water Supply – All Areas[(a)]	2,706.00	2,796.00	2,796.00	2,796.00	2,796.00	1,590.00	1,297.00	1,297.00	1,297.00	1,242.00

(a) 2015 rate effective June 1, 2015.

Meter Size	EQUIVALENT DWELLING UNITS									
5/8”	1	1	1	1	1	1	1	1	1	1
3/4”	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
1”	2	2	2	2	2	2	2	2	2	2
1-1/2”	5	5	5	5	5	5	5	5	5	5
2”	14	14	14	14	14	14	14	14	14	14
3”	30	30	30	30	30	30	30	30	30	30
4”	50	50	50	50	50	50	50	50	50	50
6”	105	105	105	105	105	105	105	105	105	105
8”	135	135	135	135	135	135	135	135	135	135
10”	190	190	190	190	190	190	190	190	190	190
12”	360	360	360	360	360	360	360	360	360	360

Impact fees are assessed per equivalent dwelling unit.

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San Antonio Water System
Schedule 17 - Ten Largest Customers – Water
Current Year and Nine Years Ago

Customer	Principal Business	Usage[a] *(million gallons)*	%	Total Revenue[b] *(in thousands)*	%
Fiscal Year Ended December 31, 2019:					
CITY OF SAN ANTONIO	Municipal Entity	570	0.9	$4,177	1.0
HEB GROCERY	Grocery	612	0.9	3,037	0.7
SAN ANTONIO HOUSING AUTHORITY	Public Housing	438	0.7	2,257	0.5
METHODIST HEALTH CARE SYSTEM	Hospital System	328	0.5	2,232	0.5
BEXAR COUNTY	County Government	428	0.7	2,076	0.5
NORTHSIDE INDEPENDENT SCHOOL DISTRICT	School System	301	0.5	2,044	0.5
UNIVERSITY OF TEXAS AT SAN ANTONIO	University	273	0.4	2,007	0.5
MARRIOTT HOTELS	Hotels	203	0.3	1,559	0.4
NORTHEAST INDEPENDENT SCHOOL DISTRICT	School System	237	0.4	1,474	0.3
EAST CENTRAL SPECIAL UTILITY DISTRICT	Retail Water Utility	261	0.4	1,354	0.3
Subtotal (10 largest)		3,650	5.6	22,217	5.2
Balance from Other Customers		62,002	94.4	406,286	94.8
Total		5,655	100.00	$ 428,503	100.00
Fiscal Year Ended December 31, 2010:					
CITY OF SAN ANTONIO	Municipal Entity	558	1.1	$ 2,375	1.1
SAN ANTONIO HOUSING AUTHORITY	Public Housing	489	0.9	1,640	0.8
HEB GROCERY	Grocery	451	0.9	1,478	0.7
NORTHSIDE INDEPENDENT SCHOOL DISTRICT	School System	277	0.5	1,114	0.5
BEXAR COUNTY	County Government	338	0.6	1,079	0.5
CPS ENERGY	Public Power Utility	298	0.6	942	0.4
NORTHEAST INDEPENDENT SCHOOL DISTRICT	School System	205	0.4	815	0.4
JW MARRIOTT RESORT	Hotels	137	0.3	753	0.4
SAN ANTONIO INDEPENDENT SCHOOL DISTRICT	School System	166	0.3	728	0.3
MAXIM INTEGRATED PRODUCT	Electronics	221	0.4	656	0.3
Subtotal (10 largest)		3,140	6.0	11,580	5.5
Balance from Other Customers		49,438	94.0	200,682	94.5
Total		52,578	100.00	$ 212,262	100.00

(a) Potable water only.
(b) Includes Water Delivery, Water Supply, EAA fees, Conservation fees, and TCEQ water fees.

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San Antonio Water System
Schedule 18 - Ten Largest Customers - Wastewater
Current Year and Nine Years Ago

Customer	Principal Business	Usage *(million gallons)*	%	Total Revenue *(in thousands)*	%
Fiscal Year Ended December 31, 2019:					
HEB GROCERY	Grocery	546	1.1	$ 3,403	1.3
SAN ANTONIO HOUSING AUTHORITY	Public Housing	429	0.9	1,869	0.7
BEXAR COUNTY	County Government	370	0.8	1,662	0.6
CITY OF SAN ANTONIO	Municipal Entity	249	0.5	1,248	0.5
NORTHSIDE INDEPENDENT SCHOOL DISTRICT	School System	196	0.4	997	0.4
TOWERJAZZ TEXAS, INC.	Electronics	235	0.5	987	0.4
METHODIST HEALTH CARE SYSTEM	Hospital System	221	0.5	949	0.4
TOYOTA	Automobile Manufacturer	210	0.4	870	0.3
FRITO LAY, INC.	Food Manufacturer	77	0.2	756	0.3
UNIVERSITY OF TEXAS AT SAN ANTONIO	University	152	0.3	645	0.2
Subtotal (10 largest)		2,687	5.6	13,386	5.1
Balance from Other Customers		44,969	94.4	247,985	94.9
Total		47,656	100.00	$ 261,371	100.00
Fiscal Year Ended December 31, 2010:					
HEB GROCERY	Grocery	388	0.8	$ 1,669	1.3
SAN ANTONO HOUSING AUTHORITY	Public Housing	492	1.1	1,030	0.8
BEXAR COUNTY	County Government	271	0.6	644	0.5
CITY OF SAN ANTONIO	Municipal Entity	210	0.5	464	0.4
FRITO LAY, INC.	Food Manufacturer	63	0.1	458	0.4
TOYOTA	Automobile Manufacturer	168	0.4	451	0.4
L & H PACKING COMPANY	Beef Processor	144	0.3	446	0.4
MAXIM INTEGRATED PRODUCT, INC.	Electronics	194	0.4	403	0.3
OAK FARMS DAIRY	Dairy Producer	57	0.1	391	0.3
AMERICAN OPPORTUNITY FOR HOUSING	Housing Services	163	0.4	340	0.3
Subtotal (10 largest)		2,150	4.7	6,296	5.0
Balance from Other Customers		43,599	95.3	119,537	95.0
Total		45,749	100.00	$ 125,833	100.00

Excludes Wholesale Wastewater usage and revenues.

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San Antonio Water System
Schedule 19 - Ten Largest Customers - Wholesale Wastewater
Current Year and Nine Years Ago
Unaudited

Customer	Principal Business	Total Revenue (*in thousands*)	%
Fiscal Year Ended December 31, 2019:			
LACKLAND AIR FORCE BASE	Military	$ 3,396	29.0
JOINT BASE SAN ANTONIO - FT. SAM HOUSTON	Military	2,319	19.8
LEON VALLEY	Municipal Government	1,590	13.6
ALAMO HEIGHTS	Municipal Government	1,216	10.4
BEXAR COUNTY WATER CONTROL DISTRICT NO. 10	County Government	789	6.7
BALCONES HEIGHTS	Municipal Government	698	6.0
KIRBY	Municipal Government	624	5.3
OLMOS PARK	Municipal Government	451	3.9
LACKLAND ANNEX	Military	343	2.9
HOLLYWOOD PARK	Municipal Government	124	1.1
Subtotal (10 largest)		11,550	98.7
Balance from Other Customers		156	1.3
Total		$ 11,706	100.00
Fiscal Year Ended December 31, 2010:			
LACKLAND AIR FORCE BASE	Military	$ 941	18.0
LEON VALLEY	Municipal Government	898	17.1
FT. SAM HOUSTON	Military	779	14.9
ALAMO HEIGHTS	Municipal Government	763	14.6
BEXAR COUNTY WATER CONTROL DISTRICT NO. 10	County Government	505	9.6
BALCONES HEIGHTS	Municipal Government	319	6.1
KIRBY	Municipal Government	305	5.8
OLMOS PARK	Municipal Government	267	5.1
LACKLAND ANNEX	Military	244	4.7
AIR FORCE VILLAGE II	Municipal Government	73	1.4
Subtotal (10 largest)		5,094	97.2
Balance from Other Customers		145	2.8
		$ 5,239	100.00

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San Antonio Water System
Schedule 20 - Ratios of Total Outstanding Debt by Type
($ in thousands, except debt per customer)
Unaudited

	Total Debt Outstanding by Type									
	Revenue Bonds[b]									
Year	Principal Outstanding	Unamortized Premium & Discount	Net Revenue Bonds Payable	Commercial Paper Notes[a]	Other Debt[b]	Total Debt Outstanding	Gross Revenues[c]	Ratio of Total Debt to Gross Revenue	Customer Connections[d]	Debt Per Customer Connection
2019	$2,546,520	$188,555	$2,735,075	$281,815	-	$3,016,890	$765,762	3.94	977,536	$3,086
2018	2,631,215	203,355	2,834,570	215,695	-	3,050,265	713,534	4.27	958,693	3,182
2017	2,537,520	198,219	2,735,739	278,060	-	3,013,799	677,159	4.45	941,566	3,201
2016	2,630,350	209,932	2,840,282	241,610	-	3,081,892	630,603	4.89	926,165	3,328
2015	2,600,096	130,267	2,730,363	135,305	88,700	2,954,368	563,111	5.25	912,430	3,238
2014	2,398,555	108,864	2,507,419	138,550	-	2,645,969	505,435	5.24	798,177	3,315
2013	2,240,915	107,919	2,348,834	186,655	-	2,535,489	467,749	5.42	784,209	3,233
2012	1,987,810	95,735	2,083,545	170,745	-	2,254,290	444,677	4.85	777,374	2,777
2011	1,894,230	4,609	1,898,839	214,930	-	2,113,769	424,049	4.97	765,400	2,756
2010	1,844,985	(8,126)	1,836,859	244,650	-	2,081,509	372,522	5.61	756,642	2,762

(a) Details regarding outstanding revenue bonds and commercial paper notes can be found in the notes to the financial statements.
(b) Includes notes payable and capital leases payable.
(c) Gross revenues are defined as operating revenues plus nonoperating revenues.
(d) Customer connections represent the combined number of billed accounts for water and wastewater services at fiscal year-end. Increase in connections from 2014 to 2015 is primarily due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.

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San Antonio Water System
Schedule 21 - Pledged Revenue Coverage
($ in thousands)
Unaudited

				Revenue Bond Debt Service[a]				Maximum Annual Debt Service Requirements			
Year	Gross Revenues[b]	Operating Expenses[c]	Net Available Revenue	Principal	Interest[d]	Total	Coverage	Total Debt[e]	Coverage	Senior Lien Debt[e]	Coverage[f]
2019	$750,849	$339,934	$410,915	$87,060	$104,831	$191,891	2.14	$195,567	2.10	$47,455[g]	8.66
2018[h]	703,202	330,235	372,967	84,875	103,922	188,797	1.98	194,518	1.92	81,428	4.58
2017	668,998	318,442	350,556	82,840	102,236	185,076	1.89	185,076	1.89	81,440	4.30
2016	622,947	315,395	307,552	78,570	98,158	176,728	1.74	185,149	1.66	84,009	3.66
2015	555,712	291,246	264,466	71,355	101,064	172,419	1.53	178,516	1.48	114,320	2.31
2014	498,334	245,055	253,279	57,850	91,704	149,554	1.69	160,510	1.58	117,126	2.16
2013	460,776	244,348	216,428	47,315	86,058	133,373	1.62	152,496	1.42	117,126	1.85
2012	437,253	237,576	199,677	44,780	80,320	125,100	1.60	138,420	1.44	122,816	1.63
2011	417,077	209,058	208,019	39,730	79,534	119,264	1.74	132,226	1.57	112,715	1.85
2010	367,847	226,489	141,358	38,590	77,098	115,688	1.22	127,264	1.11	108,947	1.30

(a) Represents current year debt service payments. Details regarding outstanding debt can be found in the notes to the financial statements. All bonded debt is secured by revenue and is included in these totals.
(b) Gross Revenues are defined as operating revenues plus nonoperating revenues less revenues from the City Public Service contract, interest on Project Funds and federal subsidy on Build America Bonds.
(c) Operating Expenses reflect operating expenses before depreciation as shown on the Statement of Revenues, Expenses, and Changes in Net Position.
(d) Interest reported net of the U.S. federal interest subsidy on the Series 2009B and 2010B Build America Bonds.
(e) Debt service requirements consist of principal and interest payments net of the U.S. federal interest subsidy on the Series 2009B and 2010B Build America Bonds.
(f) SAWS bond ordinances require the maintenance of a debt coverage ratio of at least 1.25x the maximum annual debt service on outstanding Senior Lien Obligations in order to issue additional bonds.
(g) The 2019 Maximum Annual Debt Service Senior Lien Debt reflects the senior lien debt payment due for Fiscal Year Ending December 31, 2019.
(h) In 2018, the pledged revenue calculation began excluding non-cash revenues and expenses.

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Schedule 22 - Demographic and Economic Statistics
Last Ten Calendar Years
Unaudited

Year	Population[(a)]	Median Age[(a)]	Personal Income[(a)] *(thousands of dollars)*	Per Capita Personal Income[(a)]	School Enrollment[(a)]	Building Permits- Dwelling Units[(b)]	Employment[(c)]	Unemployment Rate[(c)]
2019*						15,919	1,104,600	2.8%
2018	1,536,137	33.6	$37,827,377	$24,625	410,625	11,497	1,070,400	3.1%
2017	1,517,866	33.5	36,308,882	23,921	401,867	12,516	1,052,200	3.2%
2016	1,469,824	33.1	34,905,380	23,748	403,558	12,241	1,035,100	3.6%
2015	1,436,697	33.2	32,790,329	22,823	401,771	7,824	1,005,400	3.5%
2014	1,409,019	33.0	31,581,326	22,414	407,047	10,334	976,100	3.7%
2013	1,383,194	33.2	30,752,552	22,233	397,500	6,129	939,000	4.9%
2012	1,359,730	32.7	29,038,394	21,356	396,718	8,005	912,200	5.7%
2011	1,326,539	32.8	28,421,098	21,425	392,897	7,127	883,100	6.4%
2010	1,319,492	32.1	28,260,879	21,418	387,343	6,865	864,800	7.0%

* 2019 population, median age, personal income, per capita income and school enrollment data was not available. Building permits, employment, and unemployment rate data is preliminary.
(a) *Source: Finance Department, City of San Antonio, Texas.*
(b) *Source: Real Estate Center, Texas A&M University, Building Permits (single & multi-family), San Antonio – New Braunfels Metropolitan Statistical Area.*
(c) *Source: Bureau of Labor Statistics, San Antonio-New Braunfels Metropolitan Statistical Area, Total Non-Farm Employment and Unemployment rate.*

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San Antonio Water System
Schedule 23 - Principal Employers
Current Year and Nine Years Ago
Unaudited

	2019			2010		
Employer	**Employees**	**Rank**	**Percentage of Total City Employment[(a)]**	**Employees**	**Rank**	**Percentage of Total City Employment[(b)]**
Joint Base San Antonio (JBSA) - Lackland, Fort Sam & Randolph[(c)]	80,000	1	7.24%	75,052	1, 2, 6	8.68%
HEB Food Stores	22,000	2	1.99%	17,664	3	2.04%
USAA	19,000	3	1.72%	14,589	4	1.69%
Northside Independent School District	13,977	4	1.27%	12,597	5	1.46%
City of San Antonio	13,881	5	1.26%	11,017	7	1.27%
Methodist Health Care System	9,851	6	0.89%	7,154	10	0.83%
North East Independent School District	9,001	7	0.81%	10,223	8	1.18%
San Antonio Independent School District	7,677	8	0.70%	7,714	9	0.89%
Baptist Health Systems	6,371	9	0.58%			
JPMorgan Chase & Co.	5,000	10	0.45%			
Total	186,758		16.91%	156,010		18.04%

Source: Economic Development Division, City of San Antonio, Texas, Book of Lists 2019, and Department of Defense personnel statistics.

(a) Percent based on an Employment Estimate of 1,104,600 of non-farm jobs in the San Antonio-New Braunfels, Texas Metropolitan Statistical Area as of January 2019. Figure provided by the Texas Workforce Commission.

(b) Percent based on an Employment Estimate of 864,800 of non-farm jobs in the San Antonio-New Braunfels, Texas Metropolitan Statistical Area as of January 2010 Figure provided by the Texas Workforce Commission.

(c) In fiscal year 2012, Lackland, Fort Sam and Randolph military operations were consolidated into Joint Base San Antonio. In fiscal year 2010, the employee counts were 35,026, 28,082, and 11,944, respectively.

Table provided courtesy of City of San Antonio Finance Department.

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San Antonio Water System
Schedule 24 - Number of Employees by Functional Group
Unaudited

	Fiscal Year									
	2019	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**	**2012[(a)]**	**2011**	**2010**
Functional Group										
President/CEO	9	9	8	7	10	13	14	16	11	12
Communications & External Affairs	51	57	51	24	28	26	24	32	32	32
Customer Service	238	230	231	229	233	235	229	222	215	206
Distribution & Collection Operations	482	517	561	540	485	446	455	482	416	430
Engineering & Construction	180	177	177	166	191	221	202	225	201	189
Financial Services	63	60	64	65	67	62	64	52	67	69
Human Resources	50	42	42	45	42	35	44	27	50	49
Information Services	92	91	89	92	72	65	64	57	57	54
Legal	36	36	37	37	39	39	42	44	16	16
Operations	7	24	112	112	346	257	116	166	189	178
Production & Treatment Operations	373	358	299	302	138	131	292	363	353	358
Sewer System Improvements	33	35	33	33	31	31	28			
Water Resources & Governmental Relations	120	97	19	40	42	138	158	62	62	54
Total Employees	1,734	1,733	1,723	1,692	1,724	1,699	1,732	1,748	1,669	1,647

(a) In 2012, SAWS assumed operational control of the former BexarMet. The employee figures shown above include the employees of the former BexarMet beginning in 2012. As the merger of the former BexarMet into SAWS was not completed until January 1, 2015, a number of these employees were allocated to the special purpose entity formulated to maintain this entity until completion of the merger. The number of employees allocated to this special purpose entity during the years 2012, 2013, and 2014 were 70, 207, and 204, respectively.

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San Antonio Water System
Schedule 25 – Capital Assets
(amounts in thousands)

	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Water Delivery[(a)]	$2,885,896	$2,732,899	$2,760,533	$2,664,891	$2,489,921	$1,998,502	$1,882,369	$1,806,882	$1,680,136	$1,621,171
Water Supply:										
Water Resources	1,051,909	1,052,048	1,047,530	1,036,861	740,434	708,825	628,445	585,055	556,979	546,491
Recycle	178,213	177,846	181,281	178,219	177,487	159,171	159,059	155,556	152,993	151,640
Conservation	556	563	561	559	558	511	465	436	444	441
Stormwater	247	310	314	321	354	302	277	211	179	187
Wastewater	2,997,086	2,813,016	2,796,525	2,702,938	2,551,584	2,390,077	2,202,056	1,968,415	1,858,386	1,761,832
Chilled Water and Steam	66,710	65,553	61,280	62,800	61,162	51,117	56,929	53,011	52,948	52,957
Construction in Progress	673,633	506,810	332,635	228,595	485,962	368,688	506,829	571,547	522,438	415,810
Total assets before accumulated depreciation	7,854,250	7,349,045	7,180,659	6,875,184	6,507,462	5,677,193	5,436,429	5,141,113	4,824,503	4,550,529
Accumulated Depreciation	2,204,823	2,082,961	2,128,882	1,989,093	1,859,676	1,587,715	1,472,429	1,369,885	1,271,438	1,187,662
Net Capital Assets	$5,649,427	$5,266,084	$5,051,777	$4,886,091	$4,647,786	$4,089,478	$3,964,000	$3,771,228	$3,553,065	$3,362,867

(a) Increase in Water Delivery capital assets from 2014 to 2015 is primarily due to the merger of SAWS and SAWS District Special Project effective January 1, 2015.

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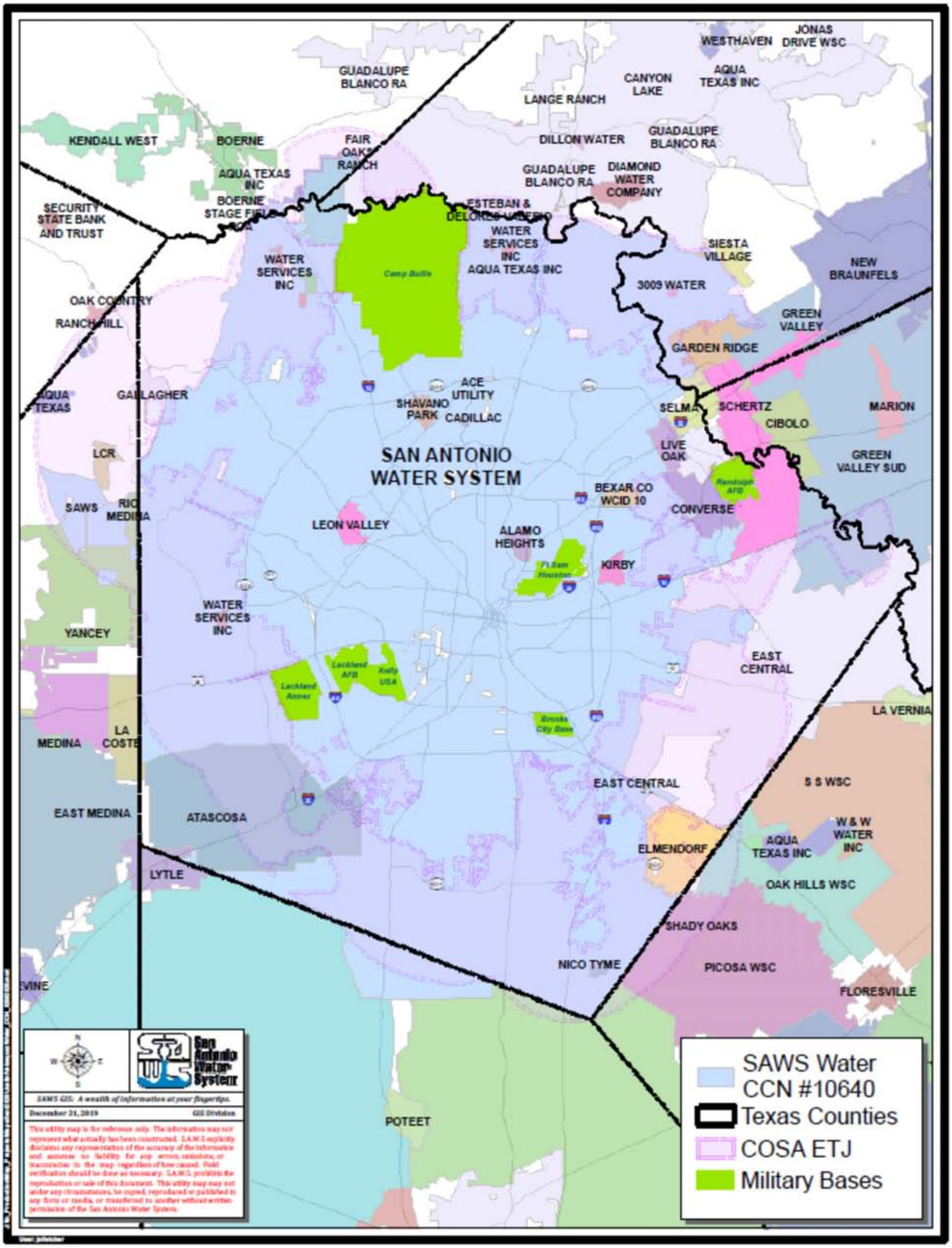
San Antonio Water System
Map 1 – Map of Water Service Area



San Antonio Water System
Schedule 26 – Operating and Capital Indicators – Water
Unaudited

	2019	2018	2017	2016	2015[f]	2014	2013	2012	2011	2010
Rainfall (Inches)	22.02	41.20	27.33	43.92	44.22	27.63	32.00	39.40	17.58	37.39
Customers/Connections[a]	515,981	505,627	496,543	488,705	482,821	373,920	367,408	365,099	360,281	356,546
Water Pumpage (Million Gallons)										
Annual Water Pumped	84,702	85,092	90,454	88,016	83,138	69,834	69,020	70,338	74,627	69,591
ASR Recharge[b]	4,430	6,427	11,198	11,159	6,911	1,569	2,629	3,742	3,928	8,320
ASR Production[b]	1,281	1,453	387	697	1,903	6,374	4,793	1,446	4,309	556
Annual Pumped for Usage	80,271	78,665	79,256	76,857	76,227	68,265	66,391	66,596	70,699	61,272
Average Daily	232.1	233.1	245.6	240.5	227.8	191.3	189.1	192.2	204.5	190.7
Maximum Daily	328.6	301.1	302.8	359.9	335.0	261.0	270.2	264.0	265.6	314.0
Metered Usage (Million Gallons)	65,655	63,660	65,318	63,934	62,896	57,261	55,108	55,320	59,133	52,578
Available Water Supply (Million Gallons)										
Permitted Edwards Aquifer rights[c]	88,753	89,989	92,632	93,289	94,144	83,126	82,902	84,822	84,640	85,035
Non-Edwards supply[d]	23,543	25,905	26,655	23,331	23,005	12,931	11,476	7,431	6,098	6,132
Stored in ASR[e]	58,288	55,138	50,240	39,429	28,967	23,959	28,764	30,928	28,632	29,013
Total water available for production	170,584	171,032	169,527	156,049	146,116	121,086	122,484	123,080	119,393	120,077
Number of Wells in Service	181	182	191	191	182	147	149	143	139	144
Overhead Storage Capacity (Million Gallons)	120.1	120.1	117.1	119.9	119.9	101.8	91.3	81.2	81.2	73.9
Total Storage Capacity (Million Gallons)	287.6	287.6	277.2	269.2	261.7	220.6	197.4	183.7	184.1	180.8
Miles of Water Main in Place	7,260	7,144	7,060	6,961	6,831	5,259	5,072	5,022	4,988	4,936
Water Main Breaks	2,357	2,329	1,843	1,194	2,363	2,018	1,863	2,128	3,397	1,475
Fire Hydrants in Place	42,513	41,553	40,872	39,988	38,460	28,753	28,323	27,914	27,566	27,115

(a) Number of customers at end of fiscal year.
(b) Gallons pumped for ASR recharge and ASR production are included in annual water pumped.
(c) Based on permitted rights authorized by the EAA as of December 31. Under current EAA rules, authorized amounts are subject to reductions of 20% to 44% during drought conditions.
(d) Includes water available under contracts to purchase or produce water from the Trinity Aquifer, Carrizo Aquifer, Canyon Lake, Medina Lake, and Lake Dunlap, as well as SAWS brackish desalination plan. There are no legally imposed reductions in these supplies during drought; however, production of water from certain of these sources is physically limited during periods of drought.
(e) Represents cumulative net amount stored in ASR (Recharge - Net production).
(f) Increase in amounts from 2014 to 2015 reflect the merger of SAWS and SAWS District Special Project effective January 1, 2015.

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San Antonio Water System
Schedule 27 – Monthly Residential Service Charges for Ten Major Texas Cities – Water
Unaudited

CITY	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Arlington										
6000 Gallons	$25.50	$25.50	$24.20	$24.20	$22.40	$21.12	$19.49	$19.49	$19.49	$19.47
9000 Gallons	$33.87	$33.87	$32.57	$32.57	$29.78	$27.96	$25.55	$25.55	$25.55	$25.53
Austin										
6000 Gallons	$37.02	$37.02	$38.35	$38.35	$37.37	$37.21	$29.74	$26.16	$26.16	$20.34
9000 Gallons	$68.34	$68.34	$70.30	$70.30	$66.88	$62.60	$51.74	$35.40	$35.40	$28.68
Corpus Christi[(a)]										
6000 Gallons	$44.05	$44.05	$42.37	$42.37	$34.76	$34.76	$32.25	$30.55	$28.97	$27.76
9000 Gallons	$68.93	$68.93	$66.29	$66.29	$55.78	$55.78	$51.79	$48.76	$45.67	$43.30
Dallas										
6000 Gallons	$20.77	$20.77	$21.69	$21.35	$20.86	$19.87	$19.39	$18.58	$17.62	$16.72
9000 Gallons	$32.77	$32.77	$34.71	$34.10	$33.25	$31.60	$30.70	$29.23	$27.67	$26.17
El Paso[(b)]										
6000 Gallons	$28.27	$27.19	$25.23	$23.82	$21.62	$17.84	$17.84	$17.01	$16.53	$16.53
9000 Gallons	$37.25	$35.82	$33.21	$31.28	$28.42	$24.10	$24.10	$22.99	$22.34	$22.34
Fort Worth										
6000 Gallons	$30.82	$30.82	$29.39	$28.60	$26.62	$24.82	$23.32	$23.32	$22.33	$22.25
9000 Gallons	$42.73	$42.73	$41.14	$40.77	$38.49	$36.05	$34.55	$34.55	$33.08	$32.92
Houston										
6000 Gallons	$35.43	$34.46	$33.52	$32.42	$31.97	$30.62	$30.26	$27.78	$25.51	$23.65
9000 Gallons	$51.84	$50.42	$49.03	$47.42	$46.76	$44.78	$44.27	$40.62	$37.30	$34.60
Lubbock										
6000 Gallons	$41.09	$41.09	$44.56	$44.56	$45.18	$43.86	$45.00	$45.00	$40.02	$40.02
9000 Gallons	$62.00	$62.00	$58.84	$58.84	$63.72	$56.79	$57.00	$57.00	$48.03	$48.03
Plano										
6000 Gallons	$31.22	$29.48	$29.48	$25.98	$25.98	$25.41	$23.10	$22.55	$20.50	$20.50
9000 Gallons	$42.35	$40.07	$40.07	$35.28	$35.28	$33.72	$30.66	$29.18	$26.53	$26.53
San Antonio (Standard)[(b)]										
6000 Gallons	$31.20	$30.72	$28.65	$27.09	$23.50	$22.65	$21.54	$21.67	$19.59	$19.85
9000 Gallons	$48.29	$47.40	$44.37	$41.96	$34.43	$33.16	$31.37	$31.53	$28.44	$28.83

Source: Based on rates posted on each respective city's website.
Note – Most charges are for a 5/8" meter; Arlington, Plano, and Lubbock charges are for a 3/4" meter.
(a) Includes Raw Water Pass Through Charge of $0.992 per 1,000 gallons.
(b) Assumes Standard rates for all periods in 2015 and prior and includes Water Supply Fee in all periods.

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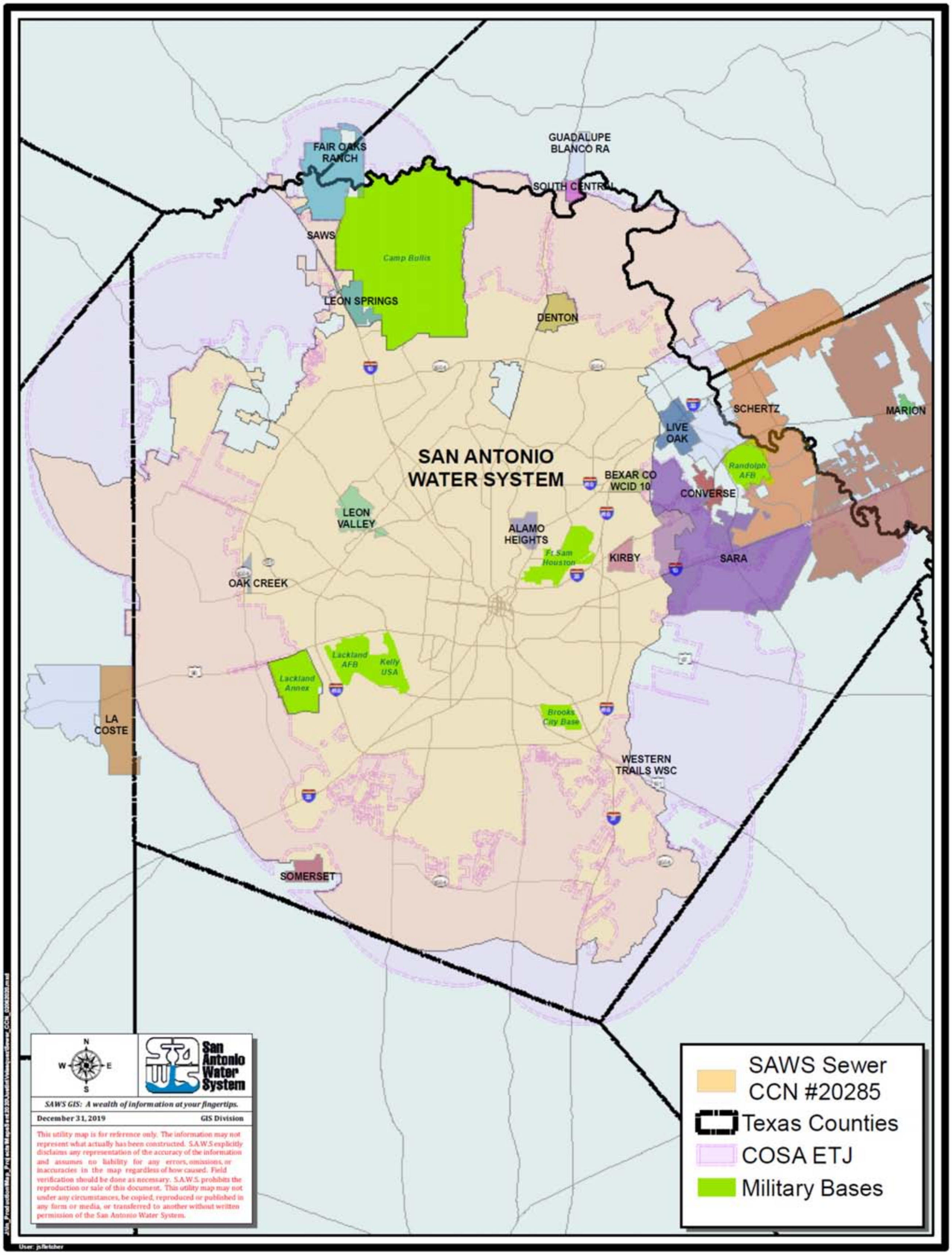
San Antonio Water System
Map 2 – Map of Wastewater Service Area



San Antonio Water System
Schedule 28 – Operating and Capital Indicators – Wastewater
Unaudited

	Fiscal Year									
	2019	**2018**	**2017**	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**
Customers/Connections[(a)]	461,555	449,893	442,552	437,460	429,609	424,257	416,801	412,275	405,119	400,096
Effluent Volumes For Major Facilities (million gallons per day)										
Clouse Water Recycle Center[(b)]										
Permit Flow	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00	125.00
Average Annual Flow	94.34	94.70	94.46	98.26	93.84	85.20	78.47	79.04	74.97	86.47
Maximum Monthly Average Flow	105.39	114.90	106.44	117.01	112.44	91.19	86.78	87.01	76.63	103.66
Leon Creek										
Permit Flow	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00	46.00
Average Annual Flow (two outfalls)	29.88	35.91	35.52	38.59	35.04	28.98	37.68	38.62	35.07	38.83
Maximum Monthly Average Flow (two outfalls)	32.67	46.36	38.61	45.06	44.26	39.03	44.16	43.77	36.46	45.30
Medio Creek										
Permit Flow	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Average Annual Flow	10.05	6.84	6.43	7.73	6.92	7.08	7.48	7.29	6.83	7.53
Maximum Monthly Average Flow	10.92	8.75	7.08	9.73	8.24	7.49	8.22	8.14	6.97	8.71
Total										
Permit Flow	187.00	187.00	187.00	187.00	187.00	187.00	187.00	187.00	187.00	187.00
Average Annual Flow	134.27	137.45	136.41	144.58	135.79	121.26	123.62	124.95	116.87	132.82
Maximum Monthly Average Flow	148.80	170.00	152.10	171.48	162.54	128.96	137.34	136.53	118.62	157.66
Amount Treated Annually (millions of gallons)[(c)]	49,009	50,170	49,790	52,916	49,565	44,261	45,123	45,732	42,659	48,480
Amount Treated Peak Day (millions of gallons)	187	235	245	311	286	196	221	199	160	250
Miles of Sewer Main In Place	5,629	5,535	5,482	5,375	5,322	5,247	5,238	5,200	5,163	5,118
Number of Manholes in Place	110,836	108,580	107,247	105,346	103,874	100,017	99,037	98,136	97,280	96,200
Number of Lift Stations	146	154	151	155	153	156	155	159	159	158

(a) Number of customers at end of fiscal year.
(b) In the summer of 2019, the Dos Rios Recycling plant was renamed Steve M. Clouse Water Recycling Center.
(c) Represents the amount of wastewater treated annually and does not reflect the amount of wastewater billed. See Schedule 4 for the amount of wastewater billed.

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San Antonio Water System
Schedule 29 – Monthly Residential Service Charges for Ten Major Texas Cities – Wastewater
Unaudited

CITY	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Arlington										
6000 Gallons	$41.44	$38.02	$34.98	$31.56	$31.10	$30.26	$28.03	$28.03	$27.37	$26.89
9000 Gallons	$55.69	$50.56	$47.52	$42.69	$42.20	$41.24	$38.02	$38.02	$37.03	$36.31
Austin										
6000 Gallons	$60.66	$60.66	$62.30	$62.30	$59.86	$55.84	$54.40	$54.30	$50.35	$48.77
9000 Gallons	$90.93	$90.93	$93.35	$93.95	$89.68	$83.23	$81.22	$81.06	$75.49	$73.22
Corpus Christi										
6000 Gallons	$45.60	$45.60	$60.79	$60.79	$52.23	$52.23	$46.96	$43.21	$43.21	$40.80
9000 Gallons	$60.15	$60.15	$80.86	$80.86	$69.48	$69.48	$62.71	$57.69	$57.69	$54.47
Dallas										
6000 Gallons	$36.94	$36.94	$37.06	$36.56	$35.78	$34.15	$33.80	$33.00	$31.70	$29.99
9000 Gallons	$53.02	$53.02	$53.20	$52.49	$51.38	$49.00	$48.50	$47.40	$45.50	$43.01
El Paso										
6000 Gallons	$24.63	$22.82	$21.14	$19.73	$17.79	$16.48	$16.48	$15.68	$15.22	$15.22
9000 Gallons	$32.89	$30.48	$28.23	$26.35	$23.77	$22.01	$22.01	$20.93	$20.31	$20.31
Fort Worth										
6000 Gallons	$38.10	$38.10	$35.53	$34.49	$30.60	$27.96	$27.96	$26.84	$26.27	$26.27
9000 Gallons	$53.90	$53.90	$50.05	$48.49	$43.16	$39.39	$39.39	$37.70	$36.86	$36.86
Houston										
6000 Gallons	$42.57	$42.39	$41.23	$39.87	$39.31	$37.65	$37.20	$34.15	$31.38	$29.09
9000 Gallons	$68.40	$67.53	$65.68	$63.51	$62.62	$59.97	$59.25	$54.40	$49.98	$46.34
Lubbock										
6000 Gallons	$38.76	$38.26	$35.02	$35.02	$28.70	$27.50	$27.50	$27.50	$24.30	$24.30
9000 Gallons	$49.89	$49.39	$44.53	$44.53	$36.05	$34.25	$34.25	$34.25	$30.45	$30.45
Plano										
6000 Gallons	$43.67	$41.57	$41.57	$39.23	$37.40	$34.40	$33.54	$33.54	$33.54	$33.54
9000 Gallons	$61.07	$58.13	$58.13	$54.86	$52.31	$47.51	$46.32	$46.32	$46.32	$46.32
San Antonio										
6000 Gallons	$33.24	$30.78	$29.71	$28.13	$27.91	$26.24	$25.26	$21.70	$19.12	$19.10
9000 Gallons	$47.21	$43.72	$42.20	$39.96	$38.00	$35.73	$34.40	$29.54	$26.02	$26.00

Source: Based on rates posted on each respective city's website.

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MONTHLY WATER, SEWER, AND WATER SUPPLY FEE RATES

In November 2015, the Board and the City Council approved revisions to the System's rate structure. The revised rate structure is designed to further encourage water conservation by reducing residential rates for very low water use while raising rates for higher levels of water use. The revised rate structure went into effect on January 1, 2016.

The System has received rate adjustments each year since 2011. On January 1, 2020, a pre-approved rate adjustment to the average residential bill of 9.9% took effect.

Residential Water Service
(Effective for Consumption on or about January 1, 2019. No changes to these rates will be implemented in 2020)

The Service Availability Charge (minimum bill) for all residential water service **INSIDE THE CITY LIMITS** of the City furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE		MONTHLY VOLUME CHARGE	
Meter Size	Service Availability Charge*	Usage Blocks, Gallons Threshold	Rate per 100 Gallons
5/8”	$ 12.82	2,992	$ 0.0740
3/4”	16.97	4,489	0.1295
1”	25.22	5,985	0.1665
1-1/2”	45.85	7,481	0.2034
2”	70.58	10,473	0.2405
3”	128.34	14,962	0.2775
4”	210.83	20,199	0.3329
6”	417.07	Over 20,199	0.4809
8”	664.33		
10”	953.27		
12”	1,778.20		

* Water Service Availability Charge shall be reduced by $2.57 Inside City Limits, if usage does not exceed 2,992 gallons.

The Service Availability Charge (minimum bill) for all residential water service **OUTSIDE THE CITY LIMITS** of the City furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE		MONTHLY VOLUME CHARGE	
Meter Size	Service Availability Charge*	Usage Blocks, Gallons Threshold	Rate per 100 Gallons
5/8”	$ 16.67	2,992	$ 0.0962
3/4”	22.06	4,489	0.1683
1”	32.79	5,985	0.2165
1-1/2”	59.61	7,481	0.2645
2”	91.75	10,473	0.3125
3”	166.84	14,962	0.3607
4”	274.06	20,199	0.4328
6”	542.18	Over 20,199	0.6253
8”	863.89		
10”	1,239.24		
12”	2,311.67		

* Water Service Availability Charge shall be reduced by $3.34 Outside City Limits, if usage does not exceed 2,992 gallons.

General Water Service
(Effective for Consumption on or about January 1, 2019. No changes to these rates will be implemented in 2020)

The Service Availability Charge (minimum bill) for all general water service **INSIDE THE CITY LIMITS** of the City furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE

Meter Size	Service Availability Charge
5/8"	$ 13.86
3/4"	19.79
1"	31.66
1-1/2"	61.29
2"	96.79
3"	179.74
4"	298.19
6"	594.32
8"	949.73
10"	1,364.34
12"	2,548.96

MONTHLY VOLUME CHARGE

Usage Blocks, Gallons	Rate Per 100 Gallons
Base*	$0.1810
>100-125% of Base	0.2084
>125-175% of Base	0.2717
>175% of Base	0.3171

* The Base Use is defined as 100% of the Annual Average Consumption.

The Service Availability Charge (minimum bill) for all general water service **OUTSIDE THE CITY LIMITS** of the City furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE

Meter Size	Service Availability Charge
5/8"	$ 16.94
3/4"	24.12
1"	38.45
1-1/2"	74.27
2"	117.20
3"	217.47
4"	360.65
6"	718.67
8"	1,148.31
10"	1,649.54
12"	3,081.65

MONTHLY VOLUME CHARGE

Usage Blocks, Gallons	Rate Per 100 Gallons
Base*	$0.2354
>100-125% of Base	0.2710
>125-175% of Base	0.3533
>175% of Base	0.4121

* The Base Use is defined as 100% of the Annual Average Consumption.

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Wholesale Water Service
(Effective for Consumption on or about January 1, 2019. No changes to these rates will be implemented in 2020)

Water service charges for all metered wholesale water connections shall be the sum of the appropriate Water Service Availability Charge and the application of the Water Monthly Volume Charges to metered water usage in every instance of service for each month or fraction thereof and are billed according to the schedule below.

MONTHLY SERVICE AVAILABILITY CHARGE

Meter Size(1)	Service Availability Charge
6”	$538.85
8”	860.58
10”	1,235.91
12”	2,308.35

MONTHLY VOLUME CHARGE

Usage Blocks, Gallons	Rate Per 100 Gallons
Base*	$0.2099
Over Base	0.6299

* The Base Use is defined as 100% of the Annual Average Consumption.

(1) Wholesale water service will not be provided through a meter smaller than 6” in order to comply with fire flow requirements and the “Criteria for Water Supply and Distribution in the City of San Antonio and its Extraterritorial Jurisdiction”.

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Irrigation Service Fee
(Effective for Consumption on or about January 1, 2019. No changes to these rates will be implemented in 2020)

The Service Availability Charge (minimum bill) for all irrigation water service **INSIDE THE CITY LIMITS** of the City furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE		MONTHLY VOLUME CHARGE	
Meter Size	Service Availability Charge	Usage Blocks, Gallons Threshold	Rate Per 100 Gallons
5/8”	$13.86		
3/4”	19.79	8,229	$0.32.92
1”	31.66	17,954	0.4607
1-1/2”	61.29	162,316	0.5925
2”	96.79	Over 162,316	0.7570
3”	179.74		
4”	298.19		
6”	594.32		
8”	949.73		
10”	1,364.34		
12”	2,548.96		

The Service Availability Charge (minimum bill) for all irrigation water service **OUTSIDE THE CITY LIMITS** of San Antonio furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE		MONTHLY VOLUME CHARGE	
Meter Size	Service Availability Charge	Usage Blocks, Gallons Threshold	Rate Per 100 Gallons
5/8”	$16.94		
3/4”	24.12	8,229	$0.4279
1”	38.45	17,954	0.5991
1-1/2”	74.27	162,316	0.7702
2”	117.20	Over 162,316	0.9841
3”	217.47		
4”	360.65		
6”	718.67		
8”	1,148.31		
10”	1,649.54		
12”	3,081.65		

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Recycled Water Service – Edwards Exchange Customers
(Effective for Consumption on or about January 1, 2020)

The Monthly Service Availability Charge (minimum bill) for all recycled water service furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE

Meter Size	Net Meter Charge
5/8"	$ 14.71
3/4"	19.13
1"	24.94
1-1/2"	39.62
2"	57.93
3"	154.09
4"	229.04
6"	436.93
8"	658.58
10"	903.06
12"	1,114.22

MONTHLY VOLUME CHARGE

Usage Blocks	Rate Per 100 Gallons Standard*	Rate Per 100 Gallons Seasonal*
Transferred Amount	$ 0.0387	$ 0.0387
All in Excess of Transferred Amount	0.1452	0.1542

* The Volume Charge "Seasonal" Rate Per 100 Gallons shall be applied to all billings beginning on or about May 1 and ending after five complete billing months on or about September 30 of each year. At all other times the Volume Charge "Standard" Rate Per 100 Gallons shall be utilized.

Recycled Water Service – Non-Edwards Exchange Customers
(Effective for Consumption on or about January 1, 2020)

The Monthly Service Availability Charge (minimum bill) for all recycled water service furnished through meters of the following sizes together with the Monthly Volume Charge measured per 100 gallons for water usage in every instance of service for each month or fraction thereof shall be as follows:

MONTHLY SERVICE AVAILABILITY CHARGE

Meter Size	Net Meter Charge
5/8"	$ 14.71
3/4"	19.13
1"	24.94
1-1/2"	39.62
2"	57.93
3"	154.09
4"	229.04
6"	436.93
8"	658.58
10"	903.06
12"	1,114.22

MONTHLY VOLUME CHARGE

Usage Blocks	Rate Per 100 Gallons Standard*	Rate Per 100 Gallons Seasonal*
First 748,000	$ 0.1533	$ 0.1670
Over 748,000	$ 0.1588	$ 0.1684

* The Volume Charge "Seasonal" Rate Per 100 Gallons shall be applied to all billings beginning on or about May 1 and ending after five complete billing months on or about September 30 of each year. At all other times the Volume Charge "Standard" Rate Per 100 Gallons shall be utilized.

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Water Supply Fee
(Effective for Consumption on or about January 1, 2020)

The Water Supply Fee assessed on all potable water service for water usage in every instance of service for each month or fraction thereof shall be as follows:

Rate Class	Usage Blocks, Gallons Threshold	Fee to be Assessed (per 100 gallons)
Residential	2,992	$0.1585
	4,489	0.2772
	5,985	0.3563
	7,481	0.4357
	10,473	0.5150
	14,962	0.5942
	20,199	0.7129
	Over 20,199	1.0296
General	Base*	$0.2989
	125% of Base	0.3438
	175% of Base	0.4482
	Over 175% of Base	0.5232
Wholesale	Base**	$0.3892
	Over Base	1.1681
Irrigation	8,229	$0.3911
	17,954	0.5474
	162,316	0.7039
	Over 162,316	0.8996

* The Base Use for General Class is defined as 100% of the Annual Average Consumption.
** The Base Use for Wholesale Class is defined as 100% of the Annual Average Consumption or as agreed to by the wholesale customer and approved by the SAWS Board of Trustees.

Residential Sewer Service
(Effective for Consumption on or about January 1, 2019. No change to these fees will be implemented in 2020.)

Sewer service charges for all metered residential connections **INSIDE THE CITY LIMITS** of the City are computed on the basis of average water usage for 90 days during three consecutive billing periods beginning after November 15 and ending on or about March 15 of each year and are billed according to the rate schedules below.

MONTHLY SERVICE AVAILABILITY CHARGE

Meter Size	Service Availability Charge*
5/8”	$14.53
3/4”	15.97
1”	18.14
1-1/2”	25.41
2”	36.31
3”	72.61
4”	108.91
6”	181.52
8”	290.41
10”	435.65
12”	580.86

MONTHLY VOLUME CHARGE

Usage Blocks, Gallons Threshold	Rate Per 100 Gallons
1,496	$0.0000
2,992	0.3104
Over 2,992	0.4657

* Customers who do not have a winter record of water usage or an interim average will be billed for sewer service assuming 5,895 gallons monthly sewer usage. Customers without a SAWS water meter will be charged the Sewer Service Availability Charge based on a 5/8” meter size.

Sewer service charges for all metered residential connections **OUTSIDE THE CITY LIMITS** of the City are computed on the basis of average water usage for 90 days during three consecutive billing periods beginning after November 15 and ending on or about March 15 of each year and are billed according to the rate schedules below.

MONTHLY SERVICE AVAILABILITY CHARGE		MONTHLY VOLUME CHARGE	
Meter Size	Service Availability Charge*	Usage Blocks, Gallons	Rate Per 100 Gallons
5/8”	$17.43	Threshold	
3/4”	19.18	1,496	$0.0000
1”	21.78	2,992	0.3726
1-1/2”	30.50	Over 2,992	0.5588
2”	43.58		
3”	87.12		
4”	130.70		
6”	217.83		
8”	348.52		
10”	522.77		
12”	697.03		

* Customers who do not have a winter record of water usage or an interim average will be billed for sewer service assuming 5,895 gallons monthly sewer usage. Customers without a SAWS water meter will be charged the Sewer Service Availability Charge based on a 5/8” meter size.

General Class Sewer Service
(Effective for Consumption on or about January 1, 2019. No change to these fees will be implemented in 2020.)

INSIDE CITY LIMITS (“ICL”)

MONTHLY SERVICE AVAILABILITY CHARGE		MONTHLY VOLUME CHARGE	
Meter Size	Service Availability Charge*	Usage Blocks, Gallons	Rate Per 100 Gallons
5/8”	$14.53	Base**	
3/4”	15.97	1,496	$0.0000
1”	18.14	Over 1,496	0.4159
1-1/2”	25.41		
2”	36.31		
3”	72.61		
4”	108.91		
6”	181.52		
8”	290.41		
10”	435.65		
12”	580.86		

* Customers without a SAWS water meter will be charged the Sewer Service Availability Charge based on a 2” meter size.
** The Base Use is defined as 100% of the Annual Average Consumption.

OUTSIDE CITY LIMITS (“OCL”)

MONTHLY SERVICE AVAILABILITY CHARGE		MONTHLY VOLUME CHARGE	
Meter Size	Service Availability Charge*	Usage Blocks, Gallons	Rate Per 100 Gallons
5/8”	$17.43	Base**	
3/4”	19.18	1,496	$0.0000
1”	21.78	Over 1,496	0.4992
1-1/2”	30.50		
2”	43.58		
3”	87.12		
4”	130.70		
6”	217.83		
8”	348.52		
10”	522.77		
12”	607.03		

* Customers without a SAWS water meter will be charged the Sewer Service Availability Charge based on a 2” meter size.
** The Base Use is defined as 100% of the Annual Average Consumption.

Wholesale Sewer Service
(Effective for Consumption on or about January 1, 2019. No change to these fees will be implemented in 2020.)

MONTHLY SERVICE AVAILABILITY CHARGE	MONTHLY VOLUME CHARGE
All Meter Sizes: $340.07	All Usage: $0.4438

WATER SERVICE INTERCONNECT RATE (EFFECTIVE JANUARY 1, 2006)

On November 17, 2005, the City Council approved the establishment of a Water Service Interconnect Rate. Water purveyors and entities outside the System have and are anticipated to continue to request connections to the System to receive potable water services on a short-term, unscheduled basis. Through these connections, these purveyors then resell the water provided by the System to their customers.

In order to ensure equitable recovery of costs and mitigate usage of these interconnections on more than a short-term basis, a Water Service Interconnect Rate was established. The rate is structured to provide short-term temporary water service while encouraging long-term water service agreements. In addition, the rate ensures that water purveyors utilizing potable water through the interconnection with the System do not profit when reselling this water to their own customers. Water purveyors who connect to the System under the Water Service Interconnect Rate shall pay for all services related to connecting to the infrastructure of the System to include applicable capital and operating costs.

Under the Water Service Interconnect Rate, water purveyors are charged all of the following:

1. The highest bill calculated based on metered usage using the System's or the water purveyors' current residential rate schedules;
2. The System's meter fee for standby service;
3. Additional standby charges of 10 times the meter fee for each month of usage, if usage occurs two consecutive months or more than three months during a calendar year; and
4. Time and material charges incurred to service the interconnect infrastructure.

IMPACT FEES (EFFECTIVE JUNE 1, 2019)

On May 16, 2019, the City Council approved amendments to the System's Impact Fees Land Use Assumption Plan ("LUAP") and Impact Fees Capital Improvements Plan ("IFCIP") based on projections for the 10-year period of 2019-2028. Using these amended plans, at the same time the City Council approved amendments to the water supply, water flow, water system development, wastewater collection, and wastewater treatment impact fees for all areas served by the System. Chapter 395, Texas Local Government Code, as amended ("Chapter 395") requires that the LUAP and IFCIP must be updated at least every five (5) years. The previous impact fees for water delivery, water supply, and wastewater were approved by the City Council in 2014.

Chapter 395 requires that impact fees be calculated for an equivalent dwelling unit ("EDU") based upon a LUAP that projects new demand for a period not to exceed 10 years and IFCIP costs associated with providing service to that new demand. The amended LUAP for 2019-2028 projects 141,770 new water EDUs and 131,840 new wastewater EDUs. The pro-rata cost of existing and future capital improvements projects to serve the 2019-2028 growth is estimated to be $1.18 billion as set forth in the amended IFCIP.

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Based on the 10-year LUAP and IFCIP numbers above, the maximum impact fees were calculated for each major category of fees; i.e., water supply, water flow, water system development, wastewater collection, and wastewater treatment for each related service area and approved as follows:

SUMMARY OF MAXIMUM IMPACT FEES
(Impact Fees are shown as per EDU)

Water Supply Impact Fee	$ 2,706
Water Delivery	
Flow	$ 1,188
System Development	
High Elevation	$ 855
Middle Elevation	$ 1,014
Low Elevation	$ 1,203
Wastewater	
Treatment	
Medio Creek	$ 1,222
Dos Rios/Leon Creek	$ 651
Collection	
Medio Creek	$ 861
Upper Medina	$ 1,422
Lower Medina	$ 520
Upper Collection	$ 2,800
Middle Collection	$ 2,013
Lower Collection	$ 902

EDWARDS AQUIFER AUTHORITY PERMIT FEE: SAN ANTONIO WATER SYSTEM

City Ordinance provides for the establishment and assessment of a pass-through charge of the EAA Permit Fee to all System water customers. The purpose of the fee is to recover fees paid to the EAA for permitted water rights. The annual fee takes into account any cumulative deficit or surplus in the recovery, number of EAA water rights and projected water sales (in gallons) for the year.

Year	EAA Fee *(per 100 gallons)*
2011	$0.01407
2012	0.01719
2012*	0.03901
2013	0.03425
2014	0.03295
2015	0.03311
2016	0.04259
2017	0.03612
2018	0.03533
2019	0.03561
2020	0.03452

* Increased April 1, 2012 to include a $50/acre-foot fee to support funding for the EAA HCP (see "THE SAN ANTONIO WATER SYSTEM – Edwards Aquifer Management; City's Edwards Aquifer Management Plan").

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY (TCEQ) FEE

The TCEQ imposes certain fees on the System, which is applied to all residential, commercial, and wholesale accounts as well as each apartment account based on the number of units. The annual fee takes into account any cumulative deficit or surplus in the recovery.

TCEQ Pass-Through Fee		
Year	Water Connection Fee	Wastewater Connection Fee
2011	$0.19	$0.05
2012	0.17	0.06
2013	0.17	0.05
2014	0.18	0.06
2015	0.18	0.06
2016	0.18	0.06
2017	0.18	0.06
2018	0.18	0.06
2019	0.20	0.06
2020	0.21	0.06

ENVIRONMENTAL MATTERS AND REGULATORY MATTERS

The City and the System are subject to the environmental regulations of the State and the United States in the operation of the System's water, reuse water, wastewater, stormwater, and chilled water systems. These regulations are subject to change, and the City and the System may be required to expend substantial funds to meet the requirements of such regulatory authorities.

GENERAL REGULATORY CLIMATE

The election of President Donald Trump in November 2016 resulted in a host of new administrators to top government agencies, especially those positions affecting the environment. Since inauguration and throughout the Trump administration, officials continue to engage in efforts to roll back previous regulations promulgated by the EPA under previous presidential administrations.

SAFE DRINKING WATER ACT

In August 1996, amendments to the federal Safe Drinking Water Act were signed into law, with additional amendments following in subsequent years, including provisions relating to eliminating lead in drinking water. The federal Safe Drinking Water Act requires the EPA to regulate a wide variety of contaminants that may be present in drinking water, including volatile organic chemicals ("VOCs"), other synthetic organic chemicals, inorganic chemicals, microbiological contaminants, and radionuclide contaminants. The list of contaminants to be regulated is so lengthy that the amendments require the EPA to establish a schedule for developing regulations regarding the contaminants. There are several phases in the EPA's regulatory timetables that are to be undertaken over the next few years. The initial impacts of the amendments to the System have not been significant, as the System has been able to materially comply with these regulations that have been promulgated to date. The full impact is difficult to project at this time, and would be dependent upon what maximum contaminant levels may be set for some future parameters and enhanced water treatment rules. Many of these parameters, such as waterborne pathogens, radionuclides, and infection by-products contaminants may require treatment changes that have not as yet been established by the EPA.

The System is in material compliance with several EPA drinking water rules adopted pursuant to the Safe Drinking Water Act including the Enhanced Surface Water Treatment Rule, the Long Term 2 Enhanced Surface Water Treatment Rule, the Stage 1 and Stage 2 Disinfectant and Disinfection Byproduct Rules, and the Unregulated Contaminant Monitoring Rule. No increased capital expenditures have been required or are anticipated to be required to maintain compliance with the foregoing rules. In October 2006, the EPA also finalized its Groundwater Rule, a regulation designed to identify and address systems including ground water supplies that are at a high risk of contamination with fecal coliforms. The EPA's Groundwater Rule may have an impact on the System if it is determined that any individual production well may need additional treatment. Estimated cost for compliance with the Groundwater Rule may be up to $2.00 per gallon at any well that may be affected.

On October 12, 2019, the EPA published proposed revisions to the "Lead and Copper Rule" under the Safe Drinking Water Act. The comment period for such revisions closed on February 12, 2020. If adopted, the EPA's proposed revisions would create a new trigger level for lead of 10 parts per billion. An extensive water sampling and analysis protocol would be required, including mandatory testing at schools and child care facilities. A public water system with test results exceeding the trigger level would be required to work with the State to develop a program to replace service lines that contain lead in its distribution system. The proposed regulation also requires an inventory of any lead service lines in both the water system's distribution system and in customer systems. It is premature to speculate on the financial impact of these rules, if adopted or as amended.

Continued changes in rules and regulations may continue to cause process modifications, which may increase the cost of the maintenance and operation of the System's drinking water treatment and distribution facilities. These modifications and upgrades may require increased capital expenditures, which may be financed by the issuance of additional revenue bonds.

FEDERAL AND STATE REGULATION OF THE WASTEWATER FACILITIES

The federal Clean Water Act and the Texas Water Code regulate the System's wastewater operations, including the collection system and the wastewater treatment plants. All discharges of pollutants into the nation's navigable waters must comply with the Clean Water Act. The Clean Water Act allows municipal wastewater treatment plants to discharge treated effluent to the extent allowed in permits issued by the EPA pursuant to the National Pollutant Discharge Elimination System (the "NPDES") program, a national program established by the Clean Water Act for issuing, revoking, monitoring, and enforcing wastewater discharge permits. The Clean Water Act authorized the EPA to delegate the EPA's NPDES permit responsibility to State or interstate agencies after certain prerequisites have been met by the relevant agencies. The EPA has delegated NPDES permit authority to the TCEQ, which means that the TCEQ is the lead agency for issuing Clean Water Act permits to the System. The System has current TPDES permits for its facilities, issued by the TCEQ, which are also issued under authority granted to the TCEQ by the Texas Water Code. Both the EPA and the TCEQ have authority to enforce the TPDES permits.

TPDES permits set limits on the type and quantity of wastewater discharge, in accordance with State and federal laws and regulations. The Clean Water Act requires municipal wastewater treatment plants to meet secondary treatment effluent limitations (as defined in EPA regulations). The Clean Water Act also requires that municipal plants meet any effluent limitations established by State or federal laws or regulations, which are more stringent than secondary treatment.

On June 1, 2010, the EPA published a notice in the Federal Register seeking stakeholder input to help the EPA determine whether to modify the NPDES regulations as they apply to municipal sanitary sewer collection systems and sanitary sewer overflows. On October 27, 2011, the Office of Water and the Office of Enforcement and Compliance Assurance issued a Memorandum on Achieving Water Quality Through Integrated Municipal Stormwater and Wastewater Plans. The memorandum outlines the development of an integrated planning approach framework to help the EPA work with local governments toward cost-effective decisions and solutions regarding the implementation of NPDES related obligations. On June 5, 2012, the EPA issued its Integrated Municipal Stormwater and Wastewater Planning Approach document, encouraging the EPA Regions to work with the states in their regions to implement integrated planning that will assist municipalities on their critical paths to achieving health and water quality objectives of the Clean Water Act by identifying efficiencies in implementing requirements that arise from distinct wastewater and stormwater programs. In August 2014, the EPA finalized amendments to the Clean Water Act's NPDES program, requiring applicants to use "sufficiently sensitive" analytical test methods when completing permit applications. Furthermore, the permit-issuing authority must prescribe that only sufficiently sensitive methods be used for analyses of pollutants or pollutant parameters under a NPDES permit. On June 12, 2019, the EPA implemented new rules related to the permit procedure to eliminate regulatory and application form inconsistencies, improve permit documentation, transparency and oversight, clarify existing regulations, and remove outdated provisions.

On February 28, 2017, President Trump executed an executive order mandating the EPA formally reconsider the EPA's Clean Water Rule, as well as the definition of "Waters of the U.S." ("WOTUS"), which, pursuant to amendments promulgated in 2015, gave the EPA jurisdiction to regulate bodies of water within the broad scope of the rule's definition. On September 12, 2019, the EPA and the U.S. Department of the Army (the "Army") announced the repeal of WOTUS definition after extended litigation, and implemented the definition of WOTUS as it existed prior to the 2015 amendments. On April 21, 2020, the EPA and the Army published a proposed "Navigable Waters Protection Rule" to replace the existing rule and streamline the definition of WOTUS to include four simple categories of jurisdictional waters. The Navigable Waters Protection Rule became effective in Texas on June 22, 2020.

Lawsuits have been filed in several jurisdictions challenging the repeal of the 2015 Clean Water Rule. At least seventeen states, as well as various environmental organizations, have filed suit against the Navigable Waters Protection Rule. It is premature to speculate on the outcome of these lawsuits or the potential effects of these lawsuits on SAWS' operations.

STATUS OF DISCHARGE PERMITS FOR CITY'S WASTEWATER TREATMENT PLANTS

All of the System's wastewater treatment plants have been issued TPDES discharge permits by the TCEQ. An occasional upset may cause permit violations, but generally all of these plants are in compliance with their respective discharge limitations. The EPA notified the System during 2007 of concerns regarding reported sewer overflows under the TPDES permits. The EPA's concerns and the System's response are discussed under "THE SAN ANTONIO WATER SYSTEM – Sewer Management Program" herein.

POTENTIAL PENALTIES FOR THE CITY'S WASTEWATER SYSTEM'S VIOLATIONS

The failure by the System to achieve compliance with the Clean Water Act could result in either a private plaintiff or the EPA instituting a civil action for injunctive relief and civil penalties of up to $37,500 per day per violation. Effective February 26, 2019, the maximum amount of a civil penalty that may be assessed increased to $54,833 per violation. In addition, the EPA has the power to issue administrative orders compelling compliance with its regulations and the applicable permits. The EPA can also bring criminal actions for recovery of penalties of up to $50,000 per day for willful or negligent violations of permit conditions or discharge without a permit. Violations of permits or administrative orders may result in the disqualification of a municipality from eligibility for federal assistance to finance capital improvements pursuant to the Clean Water Act. Even though the System will be operating under TPDES permits, it still may be liable for penalties from the EPA under the Clean Water Act.

Under State law, civil penalties for violation of State wastewater discharge permits or orders of the TCEQ can be a maximum of $25,000 per day per violation. The Executive Director of the TCEQ also has authority to levy administrative penalties of up to $25,000 per day for violations of rules, orders, or permits. Orders resulting from a civil action could require the imposition of additional user or service charges or the issuance of additional bonds to finance the improvements required to ameliorate a condition that may have caused the violation of a TCEQ permit.

See "THE SAN ANTONIO WATER SYSTEM – Sewer Management Program" herein for a discussion regarding SAWS' receipt of an administrative order from the EPA regarding an alleged violation related to discharge limitations at its Mitchell Lake facility.

GROUND-LEVEL OZONE

On March 12, 2008, the EPA revised the national ambient air quality standards (the "NAAQS") for ground-level ozone (the primary component for smog) under the Clean Air Act, as amended in 1990. Prior to the revision, an area met the ground-level ozone standards if the three-year average of the annual fourth-highest daily maximum eight-hour average at every ozone monitor (the "eight-hour ozone standard") was less than or equal to 0.08 parts per million ("ppm"). The EPA's March 2008 revision changed the NAAQS such that an area's eight-hour ozone standard must not exceed 0.075 ppm rather than the previous 0.08 ppm.

The Clean Air Act requires the EPA to designate areas as "attainment" (meeting the standards), "nonattainment" (not meeting the standards), or "unclassifiable" (insufficient data to classify). As a result of the revisions to the NAAQS, on March 10, 2009, Texas Governor Rick Perry submitted a list of 27 counties in Texas, including Bexar County, that should be designated as nonattainment. The final designations were put on hold while the EPA worked on revising the standard even further downward.

On January 6, 2010, the EPA formally proposed a regulation that would lower the primary NAAQS for ozone to a level within a range of 0.060 to 0.070 ppm. The EPA postponed issuing a final rule revising the ozone NAAQS standards, and on September 2, 2011, President Obama requested that the EPA withdraw the draft of the NAAQS revision. On September 22, 2011, the EPA issued a memorandum stating it would designate areas as non-attainment under the 2008 ozone standard of 0.075 ppm.

On November 26, 2014, the EPA proposed ozone standards to within a range of 65 to 70 parts per billion ("ppb"), while taking comment on a level as low as 60 ppb. On October 1, 2015, the EPA lowered the NAAQS for ground level ozone from 75 ppb to 70 ppb, "based on extensive scientific evidence about the ozone's effects on public health and welfare". In conjunction with the revised NAAQS, the EPA proposed separate rules to address monitoring the new standard. For Texas, the proposal calls for year-round monitoring throughout the state.

On July 18, 2018, the EPA issued a final determination that Bexar County, Texas was "non-attainment" under the NAAQS ozone standard. The State is required to amend its State Implementation Plan ("SIP") to include the new non-attainment area. Three years after the date of non-attainment determination the State must amend the SIP to provide a plan for how the non-attainment area will achieve NAAQS compliance. The process of determining what the proposed solutions will be is usually through a State sponsored stakeholder process. If Bexar County does not achieve NAAQS compliance by the date that the State submits the amended SIP, Bexar County will be subject to the requirements of the SIP. On January 15, 2020, the TCEQ proposed a SIP revision that would demonstrate that the Bexar County ozone nonattainment area would attain compliance "but for" anthropogenic emissions emanating from outside the United States. The public comment period concerning the proposed revision closed on February 18, 2020. TCEQ has not yet published responses to comments received. Upon final adoption by TCEQ, the SIP revision will be submitted to EPA for approval. Should EPA approve the SIP revision and the results of the monitoring activities conducted pursuant to the revision, that action could prevent Bexar County from being reclassified to moderate nonattainment should the area fail to attain compliance by September 24, 2021.

Should EPA not approve the SIP revision, or should a State plan formulated to reduce ground-level ozone in Bexar County be required, such a plan may curtail new industrial, commercial and residential development in San Antonio and adjacent areas (the "San Antonio Area"). Studies have shown that standards significantly more stringent than those currently in place in the San Antonio Area and across the State are required to meaningfully impact an area's ground-level ozone reading, which will be necessary to achieve compliance with the new 70 ppb ozone standard. Due to the magnitude of air emissions reductions required as well as the limited availability of economically reasonable control options, the development of a successful air quality compliance plan for areas of nonattainment within the State has proven to be extremely challenging and expensive, and will inevitably impact a wide cross-section of the business and residential community.

Failure by an area to comply with the ozone standard by the requisite time could result in the EPA's imposing a moratorium on the awarding of federal highway construction grants and other federal grants for certain public works construction projects, as well as severe emissions offset requirements on new major sources of emissions for which construction has not already commenced. Other constraints on economic growth and development include lawsuits filed under the Clean Air Act by plaintiffs seeking to require emission reduction measures that are even more stringent than those approved by the EPA. From time to time, various plaintiff environmental organizations have filed lawsuits against the TCEQ and the EPA seeking to compel the early adoption of additional emission reduction measures, many of which could make it more difficult for businesses to construct or expand industrial facilities or which could result in travel restrictions or other limitations on the actions of businesses, governmental entities and private citizens. Any successful court challenge to the currently effective air emissions control plan could result in the imposition of even more stringent air emission controls that could threaten continued growth and development in the San Antonio Area. It remains to be seen exactly what steps will ultimately be required to meet federal air quality standards, how the EPA may respond to developments as they occur, and what impact such steps and any EPA action have upon the economy and the business and residential communities in the San Antonio Area.

CLEAN POWER PLAN/AFFORDABLE CLEAN ENERGY RULE

On October 23, 2015, the EPA published its final rules to limit greenhouse gas emissions from fossil fuel fired power plants ("Clean Power Plan"). The rule limits carbon dioxide emissions from power plants, requiring a 32% nationwide reduction of such emissions (compared to 2005 emissions) by 2030. States were required to develop comprehensive plans to implement rule requirements and to submit them to the EPA by September 6, 2016, with a possible two year extension, so final complete state plans were to have been submitted no later than September 6, 2018. States were required to demonstrate emissions reductions by 2022.

Lawsuits were filed challenging the new rules and consolidated into one case in the D.C. Circuit Court. The litigation was massive in scale — nearly every state in the nation is involved in some capacity. West Virginia led a coalition of 27 states challenging the rule, while 18 states came to the Clean Power Plan's defense. Various cities, counties, environmental groups, utility companies and industry trade groups were also involved. On February 9, 2016, the United States Supreme Court granted the applications of numerous parties to stay the Clean Power Plan pending judicial review of the rule.

The D.C. Circuit Court heard oral arguments *en banc* on September 27, 2016. On March 28, 2017, President Trump signed an executive order directing the EPA Administrator to immediately review and begin steps to rescind the Clean Power Plan, which included a request to delay the court proceedings. The EPA asked the D.C. Circuit Court to delay issuing an opinion on the matter in March 2017. Following a request from the EPA, on April 28, 2017, the D.C. Circuit Court granted an abeyance of the litigation for 60 days, and subsequently granted a succession of 60-day abeyances. On July 15, 2019, the petitioners filed a motion to dismiss the petitions in the matter because of the promulgation of the new rules replacing the Clean Power Plan. The D.C. Circuit Court granted the motion to dismiss on September 17, 2019, citing the litigation as moot.

On August 31, 2018, the EPA published the proposed Affordable Clean Energy Rule ("ACER") as a replacement for the Clean Power Plan. . On June 19, 2019, the EPA issued the final ACER, which involves an effort to provide existing coal-fired electric utility generating units with standards for reducing greenhouse gas emissions. The final ACER became effective on September 6, 2019 and includes three actions: (1) the repeal of the Clean Power Plan; (2) the promulgation of a new set of emission guidelines for regulations of greenhouse gas emissions under the Clean Air Act; and (3) the promulgation of amendments to regulations governing submission and review of state plans under these and future emission guidelines. Since August 13, 2019, 23 states, as well as various local governments, utility companies, and environmental and health organizations have filed lawsuits in the D.C. Circuit Court seeking repeal of the ACER. It is premature to speculate concerning the outcome of the litigation or the potential effects of ACER on SAWS' operations.

If ACER is not upheld and regulations similar to the Clean Power Plan are eventually implemented following the conclusion of pending lawsuits, individual states would be required to reduce carbon dioxide emissions by 2030 from between approximately 7% to 48%. The State is expected to be required to reduce carbon dioxide emissions by approximately one-third as compared to 2005 emission levels. Given the size of the State's electricity market and the electricity demand from the State's large manufacturing and chemical industries, the State will be required to reduce more carbon dioxide emissions (as a matter of tons) than any other state.

It is not currently known what effect the implementation of any new rules may have on the cost of electricity. SAWS is a major consumer of electricity in the operation of its water production wells, water distribution system, sewer treatment operations, and reuse water distributions system. Any increases in the cost of electricity will increase the cost of providing these services. It is also not known whether required conversion to non-fossil fueled electrical generation will affect the provision of electrical capacity required to operate SAWS' current systems. These effects will not be known until the compliance requirements for electrical generating utilities become more certain.

LITIGATION AND OTHER MATTERS

CITY OF SAN ANTONIO GENERAL LITIGATION AND CLAIMS

This section describes the litigation involving the City that does not directly involve SAWS or claims payable out of System revenues. Please see "LITIGATION AND OTHER MATTERS – SAWS Litigation and Potential Litigation" herein for a description of litigation involving SAWS.

The City is a defendant in various lawsuits and is aware of pending claims arising in the ordinary course of its municipal and enterprise activities, certain of which seek substantial damages. That litigation includes lawsuits claiming damages that allege that the City caused personal injuries and wrongful deaths; class actions and promotional practices; various claims from contractors for additional amounts under construction contracts; and property tax assessments and various other liability claims. The amount of damages in most of the pending lawsuits is capped under the Texas Tort Claims Act, Chapter 101, Texas Civil Practice and Remedies Code, as amended (the "TTCA"). Therefore, as of the City's fiscal year ended September 30, 2019, the amount of $16,880,434 (unaudited) is included as a component of the reserve for claims liability. The estimated liability, including an estimate of incurred but not reported claims, is recorded in the Insurance Reserve Fund of the City. The status of such litigation ranges from early discovery stage to various levels of appeal of judgments both for and against the City. The City intends to defend vigorously against the lawsuits, including the pursuit of all appeals; however, no prediction can be made, as of the date hereof, with respect to the liability of the City for such claims or the outcome of such lawsuits.

In the opinion of the City Attorney, it is improbable that the lawsuits now outstanding against the City could become final in a timely manner, as determined by the date posted hereof, so as to have a material adverse financial impact upon the City that should be reflected in the financial information of the City included herein.

The City provides the following updated information related to the lawsuits:

Jimmy Maspero and Regina Maspero, et al. v. City of San Antonio, et al. Plaintiffs allege that on September 19, 2012, Plaintiffs' vehicle was involved in a collision with a vehicle being pursued by a San Antonio Police Department ("SAPD") patrol car causing the death of two of Plaintiffs' children and severe permanent injuries to the remaining Plaintiffs (two children, two adults). The Plaintiffs asserted a "state-created danger" theory under 42 U.S.C. § 1983 alleging a violation of Plaintiffs' 14th Amendment substantive due process. Plaintiffs are also asserting State law theories of negligence. Plaintiffs seek to recover damages for mental anguish, physical pain, impairment, medical expenses, and the wrongful death of two of their children. Plaintiffs are seeking monetary damages of at least $3 million. This case was been remanded back to State district court. On February 19, 2018, the District Court granted the City's plea to the jurisdiction, dismissing all claims. Plaintiffs' motion for a new trial was denied. Plaintiffs filed an appeal to the Fourth Court of Appeals. On August 28, 2019, the Fourth Court issued its opinion reversing the trial court and remanding the case to the trial court for further proceedings. The City filed a motion for rehearing en banc, which was denied. The City has filed a Petition for Review with the Texas Supreme Court. The Court has requested responsive briefing from Plaintiffs.

Elena Scott, Individually and as Representative of the Estate of Antronie Scott v. City of San Antonio, et al. Diane Peppar, et al. v. City of San Antonio, et al. An SAPD officer was attempting to execute an arrest warrant when Plaintiff's Decedent exited his vehicle with an object the officer believed was a weapon. The officer discharged his service weapon, fatally wounding the Decedent. Plaintiffs have filed suit under 42 U.S.C. § 1983 alleging use of excessive force. This case was consolidated with Diane Peppar v. City of San Antonio. Diane Peppar is Decedent Antronie Scott's mother. In March 2019, the court granted the City's motion for summary judgment, dismissing all claims against the City. The officer's motion for summary judgment was granted in part but denied as to the claims of excessive force and unreasonable seizure. This matter is not currently set for trial.

Rogelio Carlos III, et al. v. Carlos Chavez, et al. SAPD SWAT officers were assisting High Intensity Drug Trafficking Areas ("HIDTA") in searching for a fleeing suspect. Plaintiff was misidentified by the HIDTA officer as being the suspect. The HIDTA officer engaged and attempted to physically apprehend the Plaintiff and was assisted by SAPD SWAT officers. The Plaintiff suffered minor injuries as a result of the arrest, although he later complained of neck and shoulder/arm pain. Several months after the incident, the Plaintiff underwent surgery, during which procedure the Plaintiff was paralyzed. Plaintiff has filed a suit against the City and various officers under 42 U.S.C. § 1983. The Plaintiff has amended its suit to include the physicians involved in the Plaintiff's surgical procedure. Discovery is completed. Motions for summary judgment were filed on behalf of the City and officers were referred to a Magistrate Judge for review and recommendation. The Magistrate Judge recommended all claims against the City be dismissed and two of the officers be dismissed; he also recommended that all claims against the remaining three officers be dismissed except for claims of use of force under 42 U.S.C. § 1983. The Magistrate's Report and Recommendation and the Plaintiffs' objections to it are under review by the District Judge. This case is not currently set for trial.

Neka Scarborough Jenkins v. City of San Antonio. Plaintiff's Decedent was driving northbound on Blanco Road and attempted to turn left onto Lockhill Selma at a controlled traffic signal. Plaintiff contends that the traffic signal for Decedent's lane of traffic was facing the wrong direction. While making the turn, Decedent was struck by an oncoming vehicle and was killed. Plaintiff claims the City had prior notice but failed to correct the issue within a reasonable period of time. Plaintiff also claims the investigation revealed the light was placed too low and was not at the correct height for a traffic signal. This litigation is brought under the TTCA and discovery is ongoing. Under the TTCA, damages are capped at $250,000. This case is not yet set for trial.

Patricia Slack, et al. v. City of San Antonio and Steve Casanova. SAPD officers responded to persons complaining they had been assaulted in front of a nearby residence. The officers went to the address provided by the victims and approached the front door, which was behind a security door made of metal bars. The officers knocked, and the door swung open to the living room, although the security door remained closed. At least three individuals were present in the living room. One individual stood and approached the door while reaching his hand into his waistband. Officer Casanova discharged his weapon. A bullet fired by Officer Casanova grazed one individual and fatally struck a second individual. A suit was brought on behalf of the estate of the deceased, the injured individual and another individual on the scene. Plaintiffs have filed suit under 42 U.S.C. § 1983 alleging use of excessive, deadly force. Discovery is ongoing. No trial date has been set.

Texas Sterling Construction Co. v. City of San Antonio. The City contracted with Plaintiff in a Construction Manager at Risk Contract to build road improvements on Bulverde Road. Plaintiff billed on a unit cost basis and after the City paid all the bills, Texas Sterling Construction Co. wrote complaining it should have been paid for actual costs. They also claim the City caused multiple delays. Plaintiff filed suit for breach of contract and is claiming damages in excess of $250,000. Discovery is ongoing. The parties are in the process of resetting the trial date from September 14, 2020 to May 24, 2021.

Jesse Quinones, et al. v. City of San Antonio. On May 2, 2017, an SAPD officer was operating his patrol vehicle on non-emergency patrol, when he rear-ended a 2003 Tahoe with eight passengers. The officer was following plaintiffs' vehicle as they went through a green light. A third vehicle on the cross street ran the red light in front of the officer. The officer looked back at the third vehicle and did not see the Quinones vehicle stop in front of him for a traffic signal. As a result of the accident, Plaintiff Quinones is claiming back injury and has obtained a future surgical recommendation at a cost greater than $250,000. This case is set for trial October 19, 2020.

COLLECTIVE BARGAINING NEGOTIATIONS AND PETITION INITIATIVE

The City is required to collectively bargain the compensation and other conditions of employment with its fire fighters and police officers. The City engages in such negotiations with the association selected by the majority of fire fighters and police officers, respectively, as their exclusive bargaining agent. The International Association of Fire Fighters, Local 624 ("Local 624") is the recognized bargaining agent for the fire fighters. The San Antonio Police Officers Association ("SAPOA") is the recognized bargaining agent for the police officers. The following is a status of the collective bargaining negotiations with each association.

Collective Bargaining Agreement between the City of San Antonio and the San Antonio Police Officers' Association. The City Council approved a collective bargaining agreement with the SAPOA on September 1, 2016, which provides for a term through September 30, 2021.

Collective Bargaining Agreement between the City of San Antonio and the International Association of Fire Fighters, Local 624 (Local 624).

The Collective Bargaining Agreement between the City and Local 624 expired September 30, 2014, with evergreen possible through September 30, 2024. The City sought a court-ordered determination that the evergreen clause was unconstitutional. The district and appellate courts did not agree and the Texas Supreme Court declined to hear the City's appeal, effectively ending the lawsuit in 2018. Local 624 agreed to start labor negotiations on February 6, 2019, with the parties invoking the services of a former Texas Supreme Court Justice as a mediator on April 17, 2019. Local 624 then declared impasse on July 2, 2019 and invoked a binding arbitration process recently added to the City Charter that determines the terms of the collective bargaining agreement. After presentation and argument from the City and Local 624, a panel of three arbitrators provided the terms of a new collective bargaining agreement on February 13, 2020. The new contract took place immediately and concludes on December 31, 2024. Under the terms of the new agreement, multiple lump sum payments and annual raises are afforded to firefighters while firefighters will be responsible for covering a greater share of healthcare costs.

PAID SICK LEAVE ORDINANCE AND LITIGATION

Working Texans for Paid Sick Time, a State-wide coalition of grassroots organizations, submitted to the City on May 24, 2018 a petition seeking a referendum on a City ordinance requiring that businesses operating within the City (being those that annually perform 80 hours or more of work within the City) provide mandatory paid sick leave to their employees or be subject to a civil penalty of $500 per violation. Under the proposed ordinance, businesses with 15 or more employees would be required to provide eight days of paid sick leave to each employee; those with less than 15 employees would be required to provide six days of paid sick leave per employee. The City Council voted to adopt the proposed ordinance on August 16, 2019 which eliminated the need for an election on the matter. Plaintiff businesses and the State sued to enjoin implementation. Texas Organizing Project ("TOP") and MOVE Texas intervened in the suit in support of the ordinance. In August, the court approved an order submitted by the parties delaying the effective date to December 1, 2019 and abating injunction proceedings until the City amended the ordinance. On October 3, 2019, City Council approved amendments recommended by the Paid Sick Leave Commission. Plaintiff's application for injunction was heard on November 7, 2019 and was granted on November 22, 2019. MOVE Texas filed a notice of appeal of that decision and the City joined in the appeal. Plaintiffs/Appellees filed a motion with the Fourth Court of Appeals to abate the matter until the Texas Supreme Court issues a decision in the pending appeal concerning the Austin Paid Sick Leave ordinance. On March 4, 2020, the Fourth Court of Appeals granted the abatement.

SAN ANTONIO PARK POLICE OFFICERS ASSOCIATION LAWSUIT

On September 3, 2019, the San Antonio Park Police Officers Association ("PPOA"), the union representing the park and airport officers, sued the City alleging that State law requires that PPOA receive the same pay and benefits as City police officers. PPOA seeks a declaratory judgment that park and airport officers are entitled to both civil service and collective bargaining rights and benefits bargained for by the SAPOA. The City filed pleadings seeking the dismissal of the suit in November 2019. On February 21, 2020, the Court heard the City's and SAPOA's Pleas to the Jurisdiction. The Court denied the motions.

SAWS LITIGATION AND POTENTIAL LITIGATION

SAWS is a defendant in various lawsuits and is aware of pending claims arising in the ordinary course of its municipal and enterprise activities, certain of which seek substantial damages. That litigation includes lawsuits claiming damages that allege that SAWS caused personal injuries; claims from contractors for additional amounts under construction contracts; employment discrimination claims, and various other liability claims. The amount of damages in some of the pending lawsuits is capped under the TTCA. SAWS intends to defend vigorously against the lawsuits; including the pursuit of all appeals. While no prediction can be made, as of the date hereof, with respect to the liability of SAWS for such claims or the outcome of such lawsuits, in the opinion of SAWS, the outcome of the pending litigation will not have a material adverse effect on SAWS, its operations, or financial position.

Cause No. 2020ED0017; City of San Antonio by and through its San Antonio Water System vs Julio Gonzalez, Individually and as Executor of the Estate of Estela Gonzalez, et al, Probate Court No. 1. This is a condemnation suit to acquire a 0.2458 acre area in fee simple, a 0.0377 acre permanent sewer easement and a 4.584 acre temporary construction easement for the W-6 Highway 90 to Military Drive Sewer Project. SAWS' final offer amount was $257,100. The landowner did not agree to value, but did execute a Possession and Use Agreement to allow for the project to timely proceed. Special Commissioners have been appointed by the Court and SAWS is seeking a date for the Special Commissioners hearing.

Cause No. 2020ED0021; City of San Antonio by and through its San Antonio Water System vs. Milberger Landscaping, Inc., et al., Probate Court No. 1. This is a condemnation suit to acquire a permanent 0.563 acre sewer easement and two temporary construction easements totaling 0.360 acres for the E-4 Bulverde Area Capacity Relief Sewer Project. SAWS' final offer amount was $185,100. The landowner has not countered but has objected to the project and rejected SAWS' final offer. Special Commissioners have been appointed by the Court and SAWS is seeking a date for the Special Commissioners hearing.

Cause No. 2020ED0016; City of San Antonio by and through its San Antonio Water System vs. JM Assets, LP, JM Assets TIC, LLC, et al, Probate Court No. 2. This is a condemnation suit to acquire fee simple title to 24.98 acres for the W-6 Highway 90 to Military Drive Sewer Project. This is a condemnation case in which the landowner does not object to the taking or the offered compensation, but it is necessary to eliminate the claims of a third party buyer under a prior purchase agreement who has claimed damages, as well as to clear a development agreement with an adjoining landowner. SAWS has obtained an appraisal in the amount of $2,115,000 for the property. SAWS has obtained a Possession and Use Agreement from the landowner. The Special Commissioners held a hearing on June 24, 2020, in which they awarded the landowner the amount of $2,115,000, which was the amount determined by the SAWS appraisal. The award will be deposited into the registry of the court as soon as possible to ensure timely possession of the property for the project.

Cause No. 2020ED0031; City of San Antonio by and through its San Antonio Water System vs. David Neal Pape, Jeffery Pape, Rose Eleanor and Grady Christian Pape, Probate Court No. 1. This is a condemnation suit to acquire a permanent 1.547 acre sewer easement and a 0.971 acre temporary construction easement for the E-4 Bulverde Area Capacity Relief Sewer Project. SAWS' final offer amount was $421,500. The landowner has not countered. Special Commissioners have been appointed by the Court and SAWS is seeking a date for the Special Commissioners hearing.

Cause No. 2020-CI-07895; Amanda Casillas-Gallegos v. San Antonio Water System, in the 166th Judicial District Court, Bexar County, Texas. The lawsuit originated on April 29, 2020, predicated on an administrative complaint to Equal Employment Opportunity Commission ("EEOC") on May 24, 2019, alleging discrimination based on race, sex and age when she applied for promotional positions at the San Antonio Water System. EEOC issued a no-cause finding in its Dismissal and Notice of Rights letter dated January 30, 2020. The plaintiff seeks damages in excess of $300,000.

TAX MATTERS

TAX EXEMPTION

The delivery of the Bonds is subject to the opinion of Norton Rose Fulbright US LLP, San Antonio, Texas, and Escamilla & Poneck, LLP, San Antonio, Texas, as Co-Bond Counsel ("Co-Bond Counsel"), to the effect that interest on the Bonds for federal income tax purposes (1) is excludable from the gross income, as defined in section 61 of the Code, of the owners thereof pursuant to section 103 of the Code and existing regulations, published rulings, and court decisions, and (2) will not be included in computing the alternative minimum taxable income of the owners thereof. The statute, regulations, rulings, and court decisions on which such opinions are based are subject to change. The form of the opinion of Co-Bond Counsel concerning the excludability of interest on the Bonds for federal income tax purposes is attached hereto as APPENDIX E.

In rendering the foregoing opinion, Co-Bond Counsel will rely upon the certifications of the City made in a certificate of even date with the initial delivery of the Bonds pertaining to the use, expenditure, and investment of the proceeds of the Bonds and will assume continuing compliance with the provisions of the Ordinance (pertaining to the Bonds) by the City subsequent to the issuance of the Bonds. The Ordinance contains covenants by the City with respect to, among other matters, the use of the proceeds of the Bonds and the facilities and equipment financed or refinanced therewith by persons other than state or local governmental units, the manner in which the proceeds of the Bonds are to be invested, if required, the calculation and payment to the United States Treasury of any arbitrage "profits" and the reporting of certain information to the United States Treasury. Failure to comply with any of these covenants may cause interest on the Bonds to be includable in the gross income of the owners thereof from the date of the issuance of the Bonds.

Except as described above, Co-Bond Counsel will express no other opinion with respect to any other federal, state or local tax consequences under present law, or proposed legislation, resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Co-Bond Counsel's opinion is not a guarantee of a result, but represents their legal judgment based upon their review of existing statutes, regulations, published rulings and court decisions and the representations and covenants of the City described above. No ruling has been sought from the IRS with respect to the matters addressed in the opinion of Co-Bond Counsel, and Co-Bond Counsel's opinion is not binding on the IRS. The IRS has an ongoing program of auditing the tax-exempt status of the interest on municipal obligations. If an audit of the Bonds is commenced, under current procedures the IRS is likely to treat the City as the "taxpayer," and the owners of the Bonds would have no right to participate in the audit process. In responding to or defending an audit of the tax-exempt status of the interest on the Bonds, the City may have different or conflicting interests from the owners of the Bonds. Public awareness of any future audit of the Bonds may adversely affect the value and liquidity of the Bonds during the pendency of the audit, regardless of its ultimate outcome.

TAX CHANGES

Existing law may change to reduce or eliminate the benefit to bondholders of the exclusion of interest on the Bonds from gross income for federal income tax purposes. Any proposed legislation or administrative action, whether or not taken, could also affect the value and marketability of the Bonds. Prospective purchasers of the Bonds should consult with their own tax advisors with respect to any proposed or future changes in tax law.

ANCILLARY TAX CONSEQUENCES

Prospective purchasers of the Bonds should be aware that the ownership of tax-exempt obligations such as the Bonds may result in collateral federal tax consequences to, among others, financial institutions, property and casualty insurance companies, life insurance companies, certain foreign corporations doing business in the United States, S corporations with subchapter C earnings and profits, owners of an interest in a FASIT, individual recipients of Social Security or Railroad Retirement benefits, individuals otherwise qualifying for the earned income tax credit and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax-exempt obligations. Prospective purchasers should consult their own tax advisors as to the applicability of these consequences to their particular circumstances.

TAX ACCOUNTING TREATMENT OF DISCOUNT BONDS

The initial public offering price to be paid for certain Bonds may be less than the amount payable on such Bonds at maturity (the "Discount Bonds"). An amount equal to the difference between the initial public offering price of a Discount Bond (assuming that a substantial amount of the Discount Bonds of that maturity are sold to the public at such price) and the amount payable at maturity constitutes original issue discount to the initial purchaser of such Discount Bonds. A portion of such original issue discount, allocable to the holding period of a Discount Bond by the initial purchaser, will be treated as interest for federal income tax purposes, excludable from gross income on the same terms and conditions as those for other interest on the Bonds. Such interest is considered to be accrued actuarially in accordance with the constant interest method over the life of a Discount Bond, taking into account the semiannual compounding of accrued interest, at the yield to maturity on such Discount Bond and generally will be allocated to an initial purchaser in a different amount from the amount of the payment denominated as interest actually received by the initial purchaser during his taxable year.

However, such accrued interest may be required to be taken into account in determining the amount of the branch profits tax applicable to certain foreign corporations doing business in the United States, even though there will not be a corresponding cash payment. In addition, the accrual of such interest may result in certain other collateral federal income tax consequences to, among others, financial institutions, property and casualty insurance companies, life insurance companies, S corporations with subchapter C earnings and profits, owners of an interest in a FASIT, individual recipients of Social Security or Railroad Retirement benefits, individuals otherwise qualifying for the earned income tax credit, and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax-exempt obligations.

In the event of the sale or other taxable disposition of a Discount Bond prior to maturity, the amount realized by such owner in excess of the basis of such Discount Bond in the hands of such owner (adjusted upward by the portion of the original issue discount allocable to the period for which such Discount Bond was held) is includable in gross income.

Owners of Discount Bonds should consult with their own tax advisors with respect to the determination for federal income tax purposes of accrued interest upon disposition of Discount Bonds and with respect to the state and local tax consequences of owning Discount Bonds. It is possible that, under applicable provisions governing determination of state and local income taxes, accrued interest on the Discount Bonds may be deemed to be received in the year of accrual, even though there will not be a corresponding cash payment.

TAX ACCOUNTING TREATMENT OF PREMIUM BONDS

The initial public offering price to be paid for certain Bonds may be greater than the stated redemption price on such Bonds at maturity (the "Premium Bonds"). An amount equal to the difference between the initial public offering price of a Premium Bond (assuming that a substantial amount of the Premium Bonds of that maturity are sold to the public at such price) and its stated redemption price at maturity constitutes premium to the initial purchaser of such Premium Bonds. The basis for federal income tax purposes of a Premium Bond in the hands of such initial purchaser must be reduced each year by the amortizable bond premium, although no federal income tax deduction is allowed as a result of such reduction in basis for amortizable bond premium with respect to the Premium Bonds. Such reduction in basis will increase the amount of any gain (or decrease the amount of any loss) to be recognized for federal income tax purposes upon a sale or other taxable disposition of a Premium Bond. The amount of premium, which is amortizable each year by an initial purchaser, is determined by using such purchaser's yield to maturity.

Purchasers of the Premium Bonds should consult with their own tax advisors with respect to the determination of amortizable bond premium on Premium Bonds for federal income tax purposes and with respect to the state and local tax consequences of owning and disposing of Premium Bonds.

RATINGS

Fitch Ratings, Inc., Moody's Investors Service, Inc., and S&P Global Ratings have rated the Bonds "AA", "Aa2", and "AA", respectively. An explanation of the significance of such ratings may be obtained from the company furnishing the rating. The ratings reflect only the respective views of such organizations, and the City makes no representation as to the appropriateness of the ratings. There is no assurance that such ratings will continue for any given period of time or that they will not be revised downward or withdrawn entirely by any or all of such rating companies, if in the judgment of any or all companies, circumstances so warrant. Any such downward revision or withdrawal of such ratings, or any of them, may have an adverse effect on the market price of the Bonds. A securities' rating is not a recommendation to buy, sell or hold securities, and may be subject to revision or withdrawal at any time.

CONTINUING DISCLOSURE OF INFORMATION

In the Ordinance, the City, acting by and through SAWS (who has accepted such responsibility by resolution of the Board adopted on June 9, 2020), has made the following agreement for the benefit of the holders and beneficial owners of the Bonds. The City is required to observe the agreement for so long as it remains an "obligated person" with respect to the Bonds, within the meaning of the SEC's Rule 15c2-12 (the "Rule"). Under the agreement, SAWS, on behalf of the City, will be obligated to provide certain updated financial information and operating data annually, and timely notice of specified events, to the MSRB through its EMMA system where it will be available free of charge to the general public at www.emma.msrb.org.

ANNUAL REPORTS

SAWS will provide certain updated financial information and operating data to the MSRB. The information to be updated includes all quantitative financial information and operating data with respect to SAWS of the general type included in this Official Statement under the sections "DEBT AND OTHER FINANCIAL INFORMATION" and "SAWS STATISTICAL SECTION AND MANAGEMENT DISCUSSION", and in APPENDIX B. SAWS will update and provide this information within six months after the end of each fiscal year ending in and after 2020.

The financial information and operating data to be provided may be set forth in full in one or more documents or may be included by specific reference to any document available to the public through EMMA or filed with the SEC, as permitted by the Rule. The updated information will include audited financial statements, if the City commissions an audit and it is completed by the required time. If audited financial statements are not available by the required time, SAWS will provide unaudited financial statements by the required time and audited financial statements when and if such audited financial statements become available. Any such financial statements will be prepared in accordance with the accounting principles described in APPENDIX B or such other accounting principles as SAWS may be required to employ from time to time pursuant to State law or regulation.

SAWS' current fiscal year end is December 31. Accordingly, it must provide updated information by June 30 in each year, unless SAWS changes its fiscal year. If SAWS changes its fiscal year, it will file notice of such change with the MSRB.

NOTICE OF CERTAIN EVENTS

SAWS will also provide timely notices of certain events to the MSRB. SAWS will provide notice in a timely manner not in excess of 10 business days after the occurrence of the event of any of the following events with respect to the Bonds: (1) principal and interest payment delinquencies; (2) non-payment related defaults, if material; (3) unscheduled draws on debt service reserves reflecting financial difficulties; (4) unscheduled draws on credit enhancements reflecting financial difficulties; (5) substitution of credit or liquidity providers, or their failure to perform; (6) adverse tax opinions, the issuance by the IRS of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds; (7) modifications to rights of holders of the Bonds, if material; (8) Bond calls, if material, and tender offers; (9) defeasances; (10) release, substitution, or sale of property securing repayment of the Bonds, if material; (11) rating changes; (12) bankruptcy, insolvency, receivership or similar event of the City or SAWS; (13) the consummation of a merger, consolidation, or acquisition involving the City or SAWS or the sale of all or substantially all of the assets of the City or SAWS, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material; (14) appointment of a successor or additional Paying Agent/Registrar or change in the name of the Paying Agent/Registrar, if material; (15) incurrence of a Financial Obligation of the City or SAWS, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a Financial Obligation of the City or SAWS, any of which affect security holders, if material; and (16) default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a Financial Obligation of the City or SAWS, any of which reflect financial difficulties. In the Ordinance, the City adopted policies and procedures to ensure timely compliance of its continuing disclosure undertakings. Neither the Bonds nor the Ordinance make any provision for liquidity enhancement, debt service reserves as additional security for the Bonds, or credit enhancement. In addition, SAWS will provide timely notice of any failure by SAWS to provide information, data, or financial statements in accordance with its agreement described above under "Annual Reports."

For these purposes, (A) any event described in clause (12) of the immediately preceding paragraph is considered to occur when any of the following occur; the appointment of a receiver, fiscal agent, or similar officer for the City or SAWS in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City or SAWS, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City or SAWS, and (B) the City and SAWS intend the words used in clauses (15) and (16) of the immediately preceding paragraph and in the definition of Financial Obligation to have the meanings ascribed to them in SEC Release No. 34-83885, dated August 20, 2018. In the Ordinance, the term "Financial Obligation" means a (a) debt obligation; (b) derivative instrument entered into in connection with, or pledged as security or a source of payment for, an existing or planned debt obligation; or (c) guarantee of a debt obligation or any such derivative instrument; provided that "Financial Obligation" shall not include municipal securities (as defined in the Securities Exchange Act of 1934, as amended) as to which a final official statement (as defined in the Rule) has been provided to the MSRB consistent with the Rule.

Availability of Information

Effective July 1, 2009 (the "EMMA Effective Date"), the SEC implemented amendments to the Rule which approved the establishment by the MSRB of EMMA, which is now the sole successor to the national municipal securities information repositories with respect to filings made in connection with undertakings made under the Rule after the EMMA Effective Date. Commencing with the EMMA Effective Date, all information and documentation filing required to be made by SAWS in accordance with the City's undertaking made for the Bonds will be made with the MSRB in electronic format in accordance with MSRB guidelines. Access to such filings will be provided, without charge to the general public, by the MSRB.

With respect to debt of the City secured by System revenues issued prior to the EMMA Effective Date, SAWS remains obligated to make annual required filings, as well as notices of material events, under its continuing disclosure obligations relating to those debt obligations (which includes a continuing obligation to make such filings with the Texas state information depository (the "SID")). Prior to the EMMA Effective Date, the Municipal Advisory Council of Texas (the "MAC") had been designated by the State and approved by the SEC staff as a qualified SID. Subsequent to the EMMA Effective Date, the MAC entered into a Subscription Agreement with the MSRB pursuant to which the MSRB makes available to the MAC, in electronic format, all Texas-issuer continuing disclosure documents and related information posted to EMMA's website simultaneously with such posting. Until the City receives notice of a change in this contractual agreement between the MAC and EMMA or of a failure of either party to perform as specified thereunder, the City has determined, in reliance on guidance from the MAC, that making its continuing disclosure filings solely with the MSRB will satisfy its obligations to make filings with the SID pursuant to their continuing disclosure agreements entered into prior to the EMMA Effective Date.

Limitations and Amendments

The City, acting by and through SAWS, has agreed to update information and to provide notices of certain events only as described above. The City, acting by and through SAWS, has not agreed to provide other information that may be relevant or material to a complete presentation of SAWS' financial results of operations, condition, or prospects or agreed to update any information that is provided, except as described above. The City and SAWS make no representation or warranty concerning such information or concerning their usefulness to a decision to invest in or sell Bonds at any future date. The City and SAWS disclaim any contractual or tort liability for damages resulting in whole or in part from any breach of their continuing disclosure agreement or from any statement made pursuant to its agreement, although holders of Bonds may seek a writ of mandamus to compel the City and SAWS to comply with their agreements.

The City may amend its continuing disclosure agreement from time to time to adapt to changed circumstances that arise from a change in legal requirements, a change in law, or a change in the identity, nature, status, or type of operations of the City or SAWS, if (i) the agreement, as amended, would have permitted an underwriter to purchase or sell Bonds in the offering described herein in compliance with the Rule, taking into account any amendments or interpretations of the Rule to the date of such amendment, as well as such changed circumstances, and (ii) either (a) the holders of a majority in aggregate principal amount of the outstanding Bonds consent to the amendment or (b) any person unaffiliated with the City or SAWS (such as nationally recognized bond counsel) determines that the amendment will not materially impair the interests of the holders and beneficial owners of the Bonds. The City may also amend or repeal the provisions of this continuing disclosure agreement if the SEC amends or repeals the applicable provisions of the Rule or a court of final jurisdiction enters judgment that such provisions of the Rule are invalid, but only if and to the extent that the provisions of this sentence would not prevent an underwriter from lawfully purchasing or selling Bonds in the primary offering of the Bonds. If the City so amends the agreement, it has agreed that SAWS, on behalf of the City, shall include with the next financial information and operating data provided in accordance with its agreement described above under "Annual Reports" an explanation, in narrative form, of the reasons for the amendment and of the impact of any change in the type of financial information and operating data so provided.

Compliance with Prior Undertakings

During the past five years, SAWS has complied in all material respects with all continuing disclosure agreements made by the City for which SAWS has agreed to comply on the City's behalf, in accordance with the Rule.

EFFECT OF SEQUESTRATION AND IRS OPERATIONS DURING THE PANDEMIC

The City has determined that the reduced amount of refundable tax credit payments to be received from the United States Treasury in relation to its outstanding obligations designated as "build America bonds" and "qualified bonds" under the Code as a result of the automatic reductions in federal spending effective March 1, 2013 pursuant to the Budget Control Act of 2011 (commonly referred to as "Sequestration") will not have a material impact on the financial condition of the City or its ability to pay regularly scheduled debt service on its outstanding obligations when and in the amounts due and owing. Under current law, Sequestration is scheduled to continue through September 2029. The current reduction in debt subsidy payment received by the City from the U.S. Treasury as a result of Sequestration is 5.9 percent for Federal Fiscal Year 2020 and is anticipated to be 5.7 percent for Federal Fiscal Year 2021. Additionally, on June 22, 2020, the Internal Revenue Service ("IRS") issued a notice that due to the suspension or limitation of operations related to the Pandemic, the processing of returns for credit payments to issuers of qualified bonds, including requested payments, were being delayed. See "SECURITY FOR THE BONDS - Refundable Tax Credit Bonds" for a discussion related to the limited effect of Sequestration or delayed processing of returns by the IRS on the City's outstanding obligations payable from SAWS revenues as a result of a prior defeasance and refunding of certain Tax Credit Bonds.

OTHER INFORMATION

REGISTRATION AND QUALIFICATION OF BONDS FOR SALE

The sale of the Bonds has not been registered under the federal Securities Act of 1933, as amended, in reliance upon the exemption provided thereunder by Section 3(a)(2), and the Bonds have not been qualified under the Securities Act of Texas in reliance upon various exemptions contained therein; nor have the Bonds been qualified under the securities acts of any other jurisdiction. The City assumes no responsibility for qualification of the Bonds under the securities laws of any jurisdiction in which the Bonds may be sold, assigned, pledged, hypothecated, or otherwise transferred. This disclaimer of responsibility for qualification for sale or other disposition of the Bonds must not be construed as an interpretation of any kind with regard to the availability of any exemption from securities registration provisions.

It is the obligation of the Underwriters to register or qualify the sale of the Bonds under the securities laws of any jurisdiction which so requires. The City has agreed to cooperate, at the Underwriters' written request and sole expense, in registering or qualifying the Bonds or in obtaining an exemption from registration or qualification in any state where such action is necessary; provided, however, that the City shall not be required to qualify as a foreign corporation or to execute a general or special consent to service of process in any jurisdiction.

LEGAL INVESTMENTS AND ELIGIBILITY TO SECURE PUBLIC FUNDS IN TEXAS

Section 1201.041 of the Public Security Procedures Act (Chapter 1201, Texas Government Code, as amended) provides that the Bonds are negotiable instruments governed by Chapter 8, Texas Business and Commerce Code, as amended, and are legal and authorized investments for insurance companies, fiduciaries, and trustees, and for the sinking funds of municipalities or other political subdivisions or public agencies of the State of Texas. With respect to investment in the Bonds by municipalities or other political subdivisions or public agencies of the State of Texas, the Public Funds Investment Act (Chapter 2256, Texas Government Code, as amended), requires that the Bonds be assigned a rating of at least "A" or its equivalent as to investment quality by a national rating agency (see "RATINGS" herein). In addition, various provisions of the Texas Finance Code provide that, subject to a prudent investor standard, the Bonds are legal investments for state banks, savings banks, trust companies with at least $1 million of capital, and savings and loan associations. The Bonds are eligible to secure deposits of any public funds of the State, its agencies, and its political subdivisions, and are legal security for those deposits to the extent of their market value.

The City has made no investigation of other laws, rules, regulations, or investment criteria which might apply to such institutions or entities or which might limit the suitability of the Bonds for any of the foregoing purposes or limit the authority of such institutions or entities to purchase or invest in the Bonds for such purposes. The City has made no review of laws in other states to determine whether the Bonds are legal investments for various institutions in those states.

LEGAL MATTERS

The City will furnish the Underwriters with a complete transcript of proceedings incident to the authorization and issuance of the Bonds, including the unqualified approving legal opinion of the Attorney General of the State of Texas to the effect that the Bonds are valid and legally binding special obligations of the City, and based upon examination of such transcript of proceedings, the legal opinion of Co-Bond Counsel to the effect that the Bonds are valid and legally binding special obligations of the City and, subject to the qualifications set forth herein under "TAX MATTERS," the interest on the Bonds is excludable from the gross income of the owners thereof for federal income tax purposes under existing statutes, published rulings, regulations, and court decisions. The customary closing papers, including a certificate to the effect that no litigation of any nature has been filed or is then pending to restrain the issuance and delivery of the Bonds, or which would affect the provision made for their payment or security, or in any manner questioning the validity of the Bonds will also be furnished. In their capacity as Co-Bond Counsel, Norton Rose Fulbright US LLP, San Antonio, Texas, and Escamilla & Poneck, LLP, San Antonio, Texas, have reviewed the information appearing in this Official Statement under the captions "THE BONDS" (except for the information under the captions "Outstanding Debt", "Perfection of Security for the Bonds", "Book-Entry-Only System", and "Payment Record", as to which no opinion is expressed), "SECURITY FOR THE BONDS", "TAX MATTERS", "CONTINUING DISCLOSURE OF INFORMATION" (except under the caption "Compliance with Prior Undertakings", as to which no opinion is expressed), "OTHER INFORMATION - Registration and Qualification of Bonds for Sale", "OTHER INFORMATION - Legal Investments and Eligibility to Secure Public Funds in Texas", and "OTHER INFORMATION - Legal Matters" (except for the last sentence of the first paragraph of such subsection, as to which no opinion is expressed), "APPENDIX D - SELECTED PROVISIONS OF THE ORDINANCE", and "APPENDIX E – FORM OF CO-BOND COUNSEL'S OPINION" to determine whether such information accurately and fairly describes and summarizes the information, material and documents and legal issues referred to therein and is correct as to matters of law and such firms are of the opinion that the information relating to the Bonds, the Ordinance and the legal issues contained under such captions and subcaptions is an accurate and fair description of the laws and the legal issues addressed therein and, with respect to the Bonds, such information conforms to the Ordinance. Co-Bond Counsel has not, however, independently verified any of the factual information contained in this Official Statement nor has it conducted an investigation of the affairs of the City for the purpose of passing upon the accuracy and completeness of this Official Statement. No person is entitled to rely upon Co-Bond Counsel's limited participation as an assumption of responsibility for, or an expression of opinions of any kind with regard to the accuracy or completeness of any of the information contained herein. Though they represent the Co-Financial Advisors and the Underwriters from time to time in matters unrelated to the issuance of the Bonds, Co-Bond Counsel have been engaged by and only represent the System and the City in connection with the issuance of the Bonds. The legal fees to be paid to Co-Bond Counsel for services rendered in connection with the issuance of the Bonds are contingent on issuance and delivery of the Bonds. The legal opinions of Co-Bond Counsel will accompany the obligations deposited with DTC or will be printed on the definitive obligations in the event of the discontinuance of the Book-Entry-Only System. Certain legal matters will be passed upon for the City by the City Attorney, for the Board by Langley & Banack, Incorporated, San Antonio, Texas, and for the Underwriters by Bracewell LLP, Austin, Texas, Counsel for the Underwriters (whose legal fees are contingent upon the issuance of the Bonds).

The various legal opinions, to be delivered concurrently with the delivery of the Bonds, express the professional judgment of the attorneys rendering the opinions as to the legal issues explicitly addressed therein. In rendering a legal opinion, the attorney does not become an insurer or guarantor of that expression of professional judgment, of the transaction opined upon, or of the future performance of the parties to the transaction. Nor does the rendering of an opinion guarantee the outcome of any legal dispute that may arise out of the transaction.

AUTHENTICITY OF FINANCIAL DATA AND OTHER INFORMATION

The financial data and other information contained herein have been obtained from SAWS records, audited financial statements and other sources which are believed to be reliable. There is no guarantee that any of the assumptions or estimates contained herein will be realized. All of the summaries of the statutes, documents and resolutions contained in this Official Statement are made subject to all of the provisions of such statutes, documents and resolutions. These summaries do not purport to be complete statements of such provisions and reference is made to such documents for further information. Reference is made to original documents in all respects.

CO-FINANCIAL ADVISORS

PFM Financial Advisors LLC and Estrada Hinojosa & Company, Inc. are employed as Co-Financial Advisors to the System in connection with the issuance of the Bonds. The Co-Financial Advisors' fee for services rendered with respect to the sale of the Bonds is contingent upon the issuance and delivery of the Bonds. PFM Financial Advisors LLC and Estrada Hinojosa & Company, Inc., in their capacity as Co-Financial Advisors, have relied on the opinion of Co-Bond Counsel and have not verified and do not assume any responsibility for the information, covenants, and representations contained in any of the legal documents with respect to the federal income tax treatment of the interest on the Bonds, or the possible impact of any present, pending or future actions taken by any legislative or judicial bodies.

The Co-Financial Advisors have provided the following sentence for inclusion in this Official Statement. The Co-Financial Advisors have reviewed the information in this Official Statement in accordance with their responsibilities to the System, and, as applicable, to investors under the federal securities laws as applied to the facts and circumstances of this transaction, but the Co-Financial Advisors do not guarantee the accuracy or completeness of such information.

UNDERWRITING

Wells Fargo Bank, National Association (the "Representative"), as the senior and book-running manager of the group of underwriters listed on the front cover hereof (the "Underwriters"), has agreed, subject to certain conditions, to purchase the Bonds from the City at the prices indicated on page ii of this Official Statement, less an underwriting discount of $555,242.54, and no accrued interest. The Underwriters will be obligated to purchase all of the Bonds if any Bonds are purchased. The Bonds to be offered to the public may be offered and sold to certain dealers (including the Underwriters and other dealers depositing Bonds into investment trusts) at prices lower than the public offering prices of such Bonds, and such public offering prices may be changed, from time to time, by the Underwriters.

The Underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include securities trading, commercial and investment banking, financial advisory, investment management, principal investment, hedging, financing and brokerage activities. Certain of the Underwriters and their respective affiliates have, from time to time, performed, and may in the future perform, various investment banking services for the City or the System for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the Underwriters and their respective affiliates may make or hold a broad array of investments and actively trade debt and equity securities (or related derivative securities) and financial instruments (which may include bank loans and/or credit default swaps) for their own account and for the accounts of their customers and may at any time hold long and short positions in such securities and instruments. Such investment and securities activities may involve securities and instruments of the City.

Wells Fargo Securities is the trade name for certain securities-related capital markets and investment banking services of Wells Fargo & Company and its subsidiaries, including Wells Fargo Bank, National Association, the Representative of the Underwriters, which conducts its municipal securities sales, trading and underwriting operations through the Wells Fargo Bank, NA Municipal Finance Group, a separately identifiable department of Wells Fargo Bank, National Association, registered with the Securities and Exchange Commission as a municipal securities dealer pursuant to Section 15B(a) of the Securities Exchange Act of 1934.

Wells Fargo Bank, National Association, the Representative of the Underwriters, acting through its Municipal Finance Group ("WFBNA"), has entered into an agreement (the "WFA Distribution Agreement") with its affiliate, Wells Fargo Clearing Services, LLC (which uses the trade name "Wells Fargo Advisors") ("WFA"), for the distribution of certain municipal securities offerings, including the Bonds. Pursuant to the WFA Distribution Agreement, WFBNA will share a portion of its underwriting compensation with respect to the Bonds with WFA. WFBNA has also entered into an agreement (the "WFSLLC Distribution Agreement") with its affiliate Wells Fargo Securities, LLC ("WFSLLC"), for the distribution of municipal securities offerings, including the Bonds. Pursuant to the WFSLLC Distribution Agreement, WFBNA pays a portion of WFSLLC's expenses based on its municipal securities transactions. WFBNA, WFSLLC, and WFA are each wholly-owned subsidiaries of Wells Fargo & Company.

FHN Financial Capital Markets, one of the Underwriters of the Bonds, is a division of First Horizon Bank, and First Horizon Advisors, Inc. is a wholly owned subsidiary of First Horizon Bank. FHN Financial Capital Markets has entered into a distribution agreement with First Horizon Advisors, Inc., for the distribution of the offered Bonds at the original issue prices. Such arrangement generally provides that FHN Financial Capital Markets will share a portion of its underwriting compensation or selling concession with First Horizon Advisors, Inc.

On November 4, 2019, First Horizon and IberiaBank announced its intention to enter into a merger, creating a leading regional financial services company. This transaction is now complete effective July 1, 2020. The new company retains the name First Horizon and will have its headquarters in Memphis, Tennessee, expanding its presence to eleven states in the combined organization's existing footprint.

FORWARD-LOOKING STATEMENTS

The statements contained in this Official Statement, and in any other information provided by the City, that are not purely historical, are forward-looking statements, including statements regarding the City's expectations, hopes, intentions, or strategies regarding the future. Readers should not place undue reliance on forward-looking statements. All forward-looking statements included in this Official Statement are based on information available to the City on the date hereof, and the City assumes no obligation to update any such forward-looking statements. The City's and SAWS' actual results could differ materially from those discussed in such forward-looking statements.

The forward-looking statements, included herein, are necessarily based on various assumptions and estimates and are inherently subject to various risks and uncertainties, including risks and uncertainties relating to the possible invalidity of the underlying assumptions and estimates and possible changes or developments in social, economic, business, industry, market, legal, regulatory circumstances and conditions and actions taken or omitted to be taken by third parties, including customers, suppliers, business partners and competitors, and legislative, judicial, and other governmental authorities and officials. Assumptions related to the foregoing involve judgments with respect to, among other things, future economic, competitive, and market conditions of future business decisions, all of which are difficult or impossible to predict accurately and many of which are beyond the control of the City. Any of such assumptions could be inaccurate and, therefore, there can be no assurance that the forward-looking statements included in this Official Statement will prove to be accurate.

MISCELLANEOUS

References to website addresses presented herein are for informational purposes only and may be in the form of a hyperlink solely for the reader's convenience. Unless specified otherwise, such websites and the information or links contained therein are not incorporated into, and are not part of, this Official Statement for purposes of, and as that term is defined in the Rule.

The Ordinance also approved the form and content of this Official Statement and any addenda, supplement or amendment thereto and authorized its further use in the reoffering of the Bonds by the Underwriters. This Official Statement has been approved by the City Council for distribution in accordance with the provisions of the SEC's rule codified at 17 C.F.R. Section 240.15c2-12, as amended.

/s/ Ron Nirenberg
Mayor
City of San Antonio, Texas

ATTEST:

/s/ Leticia Vacek
City Clerk
City of San Antonio, Texas

APPENDIX A

GENERAL INFORMATION REGARDING THE CITY

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APPENDIX A

CITY OF SAN ANTONIO, TEXAS
GENERAL DEMOGRAPHIC AND ECONOMIC INFORMATION

This Appendix contains a brief discussion of certain economic and demographic characteristics of the City of San Antonio, Texas (the "City" or "San Antonio") and of the metropolitan area in which the City is located. Although the information in this Appendix has been provided by sources believed to be reliable, no investigation has been made by the City to verify the accuracy or completeness of such information.

COVID-19 Outbreak

The outbreak of COVID-19 (the "Pandemic") is described under the caption "INFECTIOUS DISEASE OUTBREAK – COVID-19" in the Official Statement. The outbreak of the disease has affected, and will continue to affect, travel, commerce, and financial markets at local, State, national, and global levels. While the short and long-term economic and financial effects on the City cannot be predicted at this time, the continued spread of the outbreak and proactive measures taken in an effort to mitigate or reduce that spread, is expected to materially impact the City, its operations, and the surrounding area's economy. These conditions will impact areas differently. For example, the City, an otherwise vibrant tourist location, was already experiencing significant reductions in hotel nights for the month of March 2020 prior to The Mayor of the City and the Bexar County Judge issuing declarations on March 23, 2020 ordering non-essential businesses to close and residents to remain at home except for limited purposes for a period beginning March 25, 2020. The City's Convention Center Hotel suspended operations on March 22, 2020 due to the impacts of the Pandemic. The City's annual Fiesta celebration, typically running for ten days beginning in mid-April, involving over three million people and over 100 events and having an estimated local economic impact of over $340 million, has been delayed to November 2020. All of these actions will have, at a minimum, a materially negative impact on the City's annual sales and use and hotel occupancy tax collections, and revenues collected in the City's airport funds.

As part of its ongoing budget monitoring activities, the City regularly conducts a mid-fiscal year (mid-year) budget revision to align the budget with activity for the first half of the fiscal year and update projections for the remainder of the fiscal year. Due to the financial complexities resulting from the Pandemic's impact on the City's financial performance, the mid-year budget revision occurred on the basis of unaudited financial information through April 2020, the seventh month of fiscal year 2020. With the completion of the City's audited financial report for fiscal year 2019, the City's General Fund had an additional ending balance of $15.0 million more than was anticipated with the adoption of the fiscal year 2020 budget. Through April 2020, the City has experienced a $12.7 million reduction in revenues compared to original budget estimates and currently projects a decrease in fiscal year 2020 originally budgeted revenues of $84.4 million. These decreases result from reduced sales tax revenues (actual $5.3 million reduction through April 2020; fiscal year total projected reduction of $44.1 million), reduced CPS Energy revenue transfers (actual $6.0 million reduction through April 2020; fiscal year total projected reduction of $14.6 million), and reduced miscellaneous revenue sources (actual $1.4 million reduction through April 2020; fiscal year total projected reduction of $25.7 million). The City has not realized year to date, nor is it a projecting on a complete fiscal year basis, a reduction in ad valorem tax collections.

The City has reduced expenses to offset its corresponding reduction in revenues, initially by suspending programs (resulting in reduced expenses of $83 million) and implementing departmental expense reduction strategies (resulting in an additional expense reduction of $4.5 million). Additionally, the City has been awarded approximately $361 million in federal assistance related to the COVID-19 pandemic. The City anticipates additional federal resources, however, the amount of this additional funding is not known at this time.

As of the date hereof, major national and local event cancellations and travel limitations have occurred and are ongoing; domestic and international financial markets continue to experience unprecedented volatility attributed to COVID-19 concerns. There is no way to predict the short or long-term impacts of these circumstances on the local, national, or global economies. Accordingly, the City cannot predict, and at this time makes no representations regarding, how long such modifications and restrictions in City operations and business and personal activities within the City and its surrounding area will remain in effect, whether additional measures may be instituted to address the Pandemic, or the Pandemic's impact on the general economic condition of the City.

The remainder of this Appendix is qualified by the impact to the City's operations and financial condition resultant from the effects of the COVID-19 Pandemic, and the descriptions included in this Appendix A have not been updated to account for the effects of COVID-19, as the specific impacts of this event are evolving and their extent unknown.

Population and Location

The 2010 Decennial Census ("2010 Census"), prepared by the United States Census Bureau ("U.S. Census Bureau"), found a City population of 1,327,407. For the 2010 San Antonio population, it was determined that the U.S. Census Bureau had erroneously assigned 35 census blocks to the City that are actually outside of the City limits. The revised 2010 San Antonio population is 1,326,539.

The City's Information Technology Services Department has estimated the City's population to be 1,535,229 in 2020. The U.S. Census Bureau ranks the City as the second largest in the State of Texas (the "State" or "Texas") and the seventh largest in the United States ("U.S.").

The City is the county seat of Bexar County. Bexar County had a population of 1,714,773 according to the 2010 Census. The City's Information Technology Services Department has estimated Bexar County's population to be 1,995,458 and the San Antonio-New Braunfels Metropolitan Statistical Area ("MSA") population to be 2,521,073 in 2020. The City is located in south central Texas approximately 80 miles south of the State capital of Austin, 165 miles northwest of the Gulf of Mexico, and approximately 150 miles from the U.S./Mexico border cities of Del Rio, Eagle Pass, and Laredo.

The following table provides the population of the City, Bexar County, and the San Antonio-New Braunfels MSA for the years shown:

Year	City of San Antonio	Bexar County	San Antonio-New Braunfels MSA [1]
1920	161,379	202,096	255,928
1930	231,542	292,533	351,048
1940	253,854	338,176	393,159
1950	408,442	500,460	556,881
1960	587,718	687,151	749,279
1970	654,153	830,460	901,220
1980	785,880	988,800	1,088,710
1990	935,933	1,185,394	1,324,749
2000	1,144,646	1,392,931	1,711,703 [2]
2010	1,326,539	1,714,773	2,142,508 [3]

1 Data for 1920-1990 has been restated to the redefined eight-county MSA from the original four-county MSA.
2 As of June 2003, the U.S. Office of Management and Budget redefined the MSA by increasing the number of counties from four to eight: Atascosa, Bandera, Kendall, and Medina Counties were added to its mainstays of Bexar, Comal, Guadalupe, and Wilson Counties. (The 2000 figure reflects the new 2003 redefined eight-county area.) As of December 2009, New Braunfels, Texas qualified as a new principal city of the San Antonio MSA, and the MSA was re-titled San Antonio-New Braunfels MSA.
3 Provided by the 2010 Decennial Census.
Sources: U.S. Census Bureau; Texas Association of Counties – County Information Project; and City of San Antonio, Information Technology Services Department.

Area and Topography

The area of the City has increased through numerous annexations and now contains approximately 515 square miles. The topography of San Antonio is generally hilly with heavy black to thin limestone soils. There are numerous streams fed with underground spring water. The average elevation is 788.68 feet above mean sea level.

Annexation Process

Like other large American cities, San Antonio experienced unprecedented population growth and suburbanization after World War II. San Antonio has historically been able to capture most of the growth in its Extraterritorial Jurisdiction ("ETJ") through annexation. The City of San Antonio has grown from its 1940s area of 36 square miles to its current size of over 500 square miles. San Antonio has a net taxable assessed value of $121.1 billion in tax year 2019.

2020 Annexations and Municipal Boundary Adjustments

On December 12, 2019, the City annexed approximately 2,194 acres (3.4 square miles) of land as consented to by way of development agreements between the City and each landowner. San Antonio's corporate land increased to approximately 518 square miles.

In March 2017, the Cities of San Antonio and Converse mutually approved an interlocal agreement ("ILA") that would culminate with the annexation by Converse of approximately 12 square miles of ETJ released by San Antonio and a transfer to Converse of approximately 3.6 square miles of its corporate area over the course of 17 years. The first ETJ phase was immediately released by San Antonio and then annexed by Converse in June 2017. Two municipal boundary adjustments ("MBAs") in which San Antonio ceded corporate territory to Converse were completed in December 2017.

The 2017 ILA was mutually approved prior to the passage of Senate Bill (S.B.) 6 which was effective on December 1, 2017. The passage of S.B. 6 curtailed the annexation powers of cities in counties with a population over 500,000, such as San Antonio. This new law requires the consent of land owners or voter approval of annexation in cities located in counties with more than 500,000 residents including Bexar County cities. S.B. 6 adversely affected the two cities' ability to implement the actions in the ILA. Hence, the cities mutually agreed to pause all ILA actions and renegotiate the terms of the ILA. The amended ILA was approved by the San Antonio City Council on December 5, 2019 and by the Converse City Council in December 2019.

The amended 2019 ILA established existing and future municipal and ETJ boundaries and provided a multi-phased schedule of ILA actions. San Antonio released Phase 2 ETJ Area, consisting of 900 acres to Converse on January 30, 2020. Then Converse accepted and called an annexation election for the Phase 2 ETJ Area on February 1, 2020; such election will be held in May 2021. On March 5, 2020, the San Antonio City Council approved the release of 2.06 acres of its ETJ to Converse. In addition, through a series of MBAs with Converse occurring from May 1 through July 1, 2020, San Antonio will cede approximately 625.48 acres (0.98 square mile) of corporate land to Converse. This series of MBAs will adjust San Antonio's corporate land area to approximately 517 square miles by July 1, 2020.

The City has an existing policy that provides direction and a process for annexation. The changes to State law related to annexation significantly limited the ability of a municipality in the State to initiate annexation proceedings in the future. As a result, annexation has a less prominent role in growth related policies in San Antonio.

Currently, the City is in the process of updating its Annexation and Growth Policy which will provide processes, procedures and strategic guidance on how to address new development in its ETJ. Approval of the policy update is scheduled to be completed by August 2020.

Governmental Structure

The City is a "Home Rule Municipality" that operates pursuant to the City Charter, which was adopted on October 2, 1951, became effective on January 1, 1952, and was last amended pursuant to an election held on November 6, 2018, whereby, subject only to the limitations imposed by the Texas Constitution, Texas statutes, and the City Charter, all powers of the City are vested in an 11-member City Council which enacts legislation, adopts budgets, and determines policies. The City Charter provides for a Council-Manager form of government with ten council members elected from single-member districts, and the Mayor elected at-large, each serving two-year terms, limited to four full terms of office as required by the City Charter. The Office of the Mayor is considered a separate office. All members of the City Council stand for election at the same time in odd-numbered years. The City Council appoints a City Manager who administers the government of the City and serves as the City's chief administrative officer. The City Manager serves at the pleasure of City Council, limited to a term of eight years.

Services

The full range of services provided to its constituents by the City includes ongoing programs to provide health, welfare, art, cultural, and recreational services; maintenance and construction of streets, highways, drainage, and sanitation systems; public safety through police and fire protection; and urban redevelopment and housing. The City also considers the promotion of convention and tourism and participation in economic development programs high priorities. The funding sources from which these services and capital programs are provided include ad valorem, sales and use, and hotel occupancy tax receipts, grants, user fees, debt proceeds, tax increment financing, and other sources.

In addition to the above-described general government services, the City provides services financed by user fees set at levels adequate to provide coverage for operating expenses and the payment of outstanding debt. These services include airport and solid waste management.

Electric and gas services to the San Antonio area are provided by CPS Energy ("CPS"), an electric and gas utility owned by the City that maintains and operates certain utilities infrastructure. This infrastructure includes a 19-generating unit electric system and the gas system that serves the San Antonio area. CPS' operations and debt service requirements for capital improvements are paid from revenues received from charges to its customers. As specified in the City ordinances authorizing the issuance of its system debt, CPS is obligated to transfer a portion of its revenues to the City. CPS revenue transfers to the City for the City's fiscal year ended September 30, 2019 were $358,788,274. (See "San Antonio Electric and Gas Systems" herein.)

Water services to most of the City are provided by the San Antonio Water System ("SAWS"), San Antonio's municipally-owned water supply, water delivery, and wastewater treatment utility. SAWS was founded in April 1992 as a separate, consolidated entity. SAWS' operating and debt service requirements for capital improvements are paid from revenues received from charges to its customers. SAWS is obligated to transfer a portion of its revenues to the City. SAWS revenue transfers to the City for the City's fiscal year ended September 30, 2019 were $18,863,829. (See "THE SAN ANTONIO WATER SYSTEM" in the Official Statement.)

Economic Factors

The City facilitates a favorable business environment that supports economic diversification and growth. San Antonio's economic base is comprised of a variety of industries, including: healthcare and bioscience, aerospace, information technology, advanced manufacturing, new energy, and financial services; all with growing international trade. Support for these economic activities is demonstrated through the City's commitment to ongoing infrastructure improvements and development, and investment in a growing and dedicated workforce. This commitment and the City's continued status as one of the top leisure and convention destinations in the country support a strong and growing economy.

Traditional economic growth indicators are charting mostly positive for San Antonio. Population grew by 43,762 between 2017 and 2018 to 2.52 million. GDP also grew by $9 billion to $134 billion in 2019. San Antonio's unemployment rate of 13.2% as of April 2020 is above average when compared to the State at 13.0% but fares well when compared to the nation at 14.4%. San Antonio experienced a (-8.7)% annual job growth rate between 2019 and 2020, with total nonfarm employment in the San Antonio – New Braunfels MSA for April 2020 decreasing to 978,500.

The City's Economic Development Department ("EDD") seeks to promote inclusive growth through strategic investments and partnerships. All full-time employees associated with a project receiving an economic incentive from the City must earn at least $12.60 per hour, which is considered the poverty level for a family of four by the U.S. Department of Health and Human Services. In addition, at least 70% of all full-time employees must meet the all-industry wage within one year of the execution of an incentive agreement with the City. The all-industry wage is currently $16.65 and is determined by the Bureau of Labor Statistics by conducting an Occupational Employment

Survey in the San Antonio – New Braunfels Metropolitan Statistical Area. The City obtains this data from the Texas Workforce Commission on an annual basis. These wage standards are intended to drive an incremental increase in wages in San Antonio.

The San Antonio Economic Development Corporation ("SAEDC") was established by the City to foster the commercialization of intellectual property in San Antonio through direct equity investment in projects. This economic development strategy seeks to realize a direct return on investment back to the City. By making equity investments in later stage companies or key entrepreneurs with proven track records, the City supports commercialization of intellectual property in San Antonio, creating more jobs, investments, and entrepreneurs.

Healthcare and Bioscience

According to the Biosciences Economic Impact Study, a 2018 Economic Impact Study commissioned by the San Antonio Chamber of Commerce, the economic impact from this industry sector totaled approximately $30.6 billion in 2017 measured conservatively, and $40.2 billion by a more comprehensive estimate. The industry was composed of 182,112 jobs in 2017, meaning that more than one of every six employees in San Antonio works in the healthcare and bioscience industry. Since 2009, the healthcare and bioscience industry has added 40,899 net new jobs, an increase of 29%.

Central to the healthcare and bioscience industry is the University of Texas Health Science Center at San Antonio ("UT Health"), located on more than 100 acres in the heart of the medical center. A total of 4,290 students (including residents and fellows) are enrolled in UT Health's five schools. UT Health employs approximately 2,027 faculty and 5,072 staff with a total annual operating budget of approximately $993 million, supporting campuses in San Antonio, Laredo, and the Rio Grande Valley. UT Health is one of the country's leading health science universities and ranks in the top 3% of all institutions worldwide receiving federal funding from the National Institutes of Health.

Brooke Army Medical Center ("BAMC") contains the largest inpatient medical facility in the Department of Defense ("DoD"), the only DoD Burn Center, and the only DoD Level 1 Trauma Center in the U.S. Wilford Hall Ambulatory Surgical Center ("WHASC") at Joint Base San Antonio-Lackland is the largest outpatient ambulatory surgical center in the DoD with more than 29 sub-specialties and 30 credited graduate medical education training programs. The facility provides primary and specialty care; outpatient surgery; a sleep center; a contingency aeromedical staging facility; and eye, hearing and diabetes centers of excellence. The San Antonio Military Health System ("SAMHS") oversees the healthcare delivery of 240,000 DoD beneficiaries in the San Antonio metropolitan region. Healthcare services are provided by the BAMC and the WHASC. The SAMHS treatment facilities manage a total combined budget of over $1.2 billion and have an economic impact of $1 billion annually.

In June 2014, the University of the Incarnate Word ("UIW") announced plans to build the City's first osteopathic medical school (the "School of Medicine") on the campus of Brooks City-Base ("Brooks"). Phase I of the medical school consisted of four buildings in the historic district of Brooks. The cost of building the School of Medicine was approximately $50 million. UIW began leasing the buildings in 2014 and will take ownership after 25 years. The School of Medicine opened in July 2017 with their first class of 162 students planning to graduate in May 2021.

The Texas Biomedical Research Institute ("Texas Biomed") is one of the largest independent, non-profit, biomedical research institutions in the U.S. conducting internationally renowned fundamental and applied research in the medical sciences. With the nation's only privately-owned biosafety level 4 laboratory, designed for maximum containment, Texas Biomed investigators can safely study deadly pathogens for which there currently are no treatments or vaccines, including potential bio- terror agents and emerging diseases. In August 2017, City Council approved a loan of $250,000 to Texas Biomed to fund the design of a second state-of-the-art biosafety level 4 facility on its City Council District 6 campus. The $49 million expansion project is anticipated to retain 43 jobs and create at least nine additional full-time jobs in the newly expanded facility.

The University of Texas at San Antonio ("UTSA") houses a number of research institutes. The Neuroscience Research Center, which is funded by $6.3 million in ongoing grants, is tasked with training students in research skills while they perform basic neuroscience research on subjects such as aging and Alzheimer's disease. UTSA is also a partner in Morris K. Udall Centers of Excellence for Parkinson's Disease Research. A joint partnership between

UTSA, the UT Health Science Center, and the participation of Texas Biomed and the Southwest National Primate Research Center, has resulted in the formation of the San Antonio Institute of Cellular and Molecular Primatology ("SAICMP"). The focus of the SAICMP is the study of primate stem cells and early embryos to develop nonhuman model systems for studies of primate stem cells and their applications to regenerative medicine. The South Texas Center for Emerging Infectious Diseases was established to focus State and national attention on UTSA in the fields of molecular microbiology, immunology, medical mycology, virology, microbial genomics, vaccine development, and biodefense.

The SAEDC has supported several projects within the healthcare and bioscience sphere. To date, the SAEDC has incentivized the following bioscience and healthcare companies, StemBioSys, Inc., InCube, Innovative Trauma Care, Inc., and BioAffinity Technologies. Throughout 2017 and 2018, EDD and the SAEDC facilitated an ongoing working group of local military, academic, and private life science industry leaders on a study and action plan for greater commercialization out of the military medical research missions in San Antonio. The final San Antonio Military Life Science Commercialization Action Plan and recommendation for a San Antonio Military Medical Innovation ("SAMMI") Specialist were presented to the working group in July 2018. Based on the recommendation, the SAEDC hired a SAMMI Director in 2019 who facilitates the implementation of the San Antonio Military Life Science Charter and coordinates the development of a local alliance to provide long-term sustainability and funding. Additionally, the SAEDC Board approved the creation and guidelines for a SAMMI Fund with the goal of providing financial assistance to early-stage local companies that are engaged in the development of products and technologies that support military medicine with the potential application for broader civilian markets.

In September 2017, City Council approved a grant of up to $200,000 for Pelican Therapeutics to relocate its headquarters to San Antonio and create 22 new full-time jobs within five years. Pelican Therapeutics is a subsidiary of Heat Biologics, a Durham, North Carolina–based biopharmaceutical firm focused on developing anticancer drugs. Pelican Therapeutics will establish lab and office space in City Council District 8 to support efforts linked to a $15.2 million Cancer Prevention Research Institute of Texas grant.

The Texas Research and Technology Foundation ("TRTF") is a non-profit organization that focuses on life science and technology-based economic development in San Antonio. On August 2017, TRTF acquired the 4-acre Merchant's Ice complex to establish a life science and technology focused Innovation District (the "Innovation District") that will be managed by VelocityTX, the organization's innovation, commercialization, and entrepreneurial development-focused subsidiary. The Innovation District will include an incubator and innovation center to serve multiple target industries and provide a broad array of resources to entrepreneurs. TRTF estimates that when completed, the Innovation District will support approximately 665 jobs with combined wages and benefits of over $78 million annually.

Workforce Development

The City provides $200,000 annually to SA Works and $3.7 million annually to various non-profit organizations that provide workforce services. Combined, these agencies work to prepare the local workforce to meet industry demands so they have the talent they need to grow San Antonio. The focus of contracts with various workforce agencies is to support activities and programming directly related to preparing the workforce to gain meaningful employment and fill industry needs.

SA Works is tasked with identifying skill gaps in the targeted industries of IT and cyber, healthcare, and manufacturing through industry convenings and surveys.

The City also works closely with Workforce Solutions Alamo ("WSA"). WSA is the regional workforce development board and implements state and federal jobs programs. The City works to align the workforce agencies they fund with WSA programs and to co-enroll participants to leverage funds and provide more effective services to residents.

The Alamo Colleges are the local community college district. The City partners with the Alamo Colleges by providing tuition scholarships through the contracted workforce agencies and through an agreement which supports several programs including the Alamo Academies, a program that prepares high school students for Science, Technology, Engineering, and Math ("STEM") careers driven by industry. In 2019, the Alamo Promise program was officially rolled out for implementation beginning August 2020. The goal of this program is to cover tuition for Bexar County high school graduates to attend community college.

Financial Services

The largest private sector employer in the industry is United Services Automobile Association ("USAA"). The company has approximately 9.13 million customers, comprised of military members, veterans, and their families. The company currently employs over 34,000 people nationwide. While this sector is led by USAA, San Antonio is home to other insurance company headquarters and regional operations centers for many health care insurers. Insurers with substantial regional operations centers in San Antonio include: Nationwide Mutual Insurance Company, Caremark, United Health, and PacifiCare.

San Antonio is also the home of many banking headquarters and regional operations centers such as Frost Bank, Broadway National Bank, and USAA Federal Savings Bank. In December 2014, Security Service Federal Credit Union, the largest credit union in Texas and seventh largest credit union in the United States, established its corporate headquarters in City Council District 8. In October of 2017, San Antonio-based lending institution Credit Human announced plans to invest $113 million to construct a new state-of-the-art corporate headquarters on the Broadway corridor in City Council District 1. The facility will seek a LEED Gold rating, making it one of the most sustainably built facilities of its kind in the nation. The new headquarters will bring 485 jobs to the urban core. Other companies with large regional operations centers in San Antonio include: Bank of America, Wells Fargo, J.P. Morgan Chase, Citigroup, and Pentagon Federal Credit Union.

In 2018, Victory Capital Management ("Victory"), an investment management company with $63.6 billion in assets under management, acquired USAA Asset Management Co. from USAA. In January 2019, the City Council approved a $500,000 grant for Victory to relocate its headquarters operations to San Antonio and retain the 300 existing USAA jobs. In addition, Victory agreed to create 51 new high wage jobs, invest $500,000, partner with the City by implementing financial literacy programs for military personnel, and sponsor at least five annual paid student internships.

Hospitality Industry

The City's diversified economy includes a significant sector relating to the hospitality industry. An Economic Impact Report of San Antonio's Hospitality Industry (representing 2017 data) found that the hospitality industry has an economic impact of $15.2 billion. The estimated annual payroll for the industry is $3.2 billion, and the industry provided an average of 140,188 jobs.

In 2019, the City's overall level of hotel occupancy was up 0.6%; room supply increased 1.5%; total room nights sold increased 2.1%; the average daily room rate decreased 2.6%; revenue per available room decreased 2.1%; and overall revenue decreased 0.6%.

Tourism. The list of attractions in the San Antonio area includes, among many others, the Alamo and other sites of historic significance, the River Walk, and two major theme parks, SeaWorld San Antonio and Six Flags Fiesta Texas. San Antonio attracts 39 million visitors a year. Of these, over 24.2 million are overnight visitors, historically placing San Antonio as one of the top U.S. destinations in Texas. Recent fiscal year 2019 accomplishments contributing to Visit San Antonio's success include: (1) having obtained over 40.8 million in online engagement, showing consumer interest in San Antonio through the Visit San Antonio website and social-media channels, both important travel decision influencers; (2) proactively managed more than 250 meetings and conventions and the opportunity to reach an additional 495 meetings via our meetings.visitsanantonio.com website, calls and walk-in clients; resulting in a total reach of over 742,000 attendees; and (3) reported an estimated $40.1 million in earned media. This media value is the dollar value of the positive media coverage generated by the Visit San Antonio communications team, which represents the stories and articles in print (i.e., magazines, newspapers, etc.), TV, radio, and online media; the dollar figure aligns with what the advertising cost of that coverage would have been if Visit San Antonio had purchased the exposure.

Conventions. San Antonio is also one of the top convention cities in the country and has hosted 6.8 million business visitors a year to the area for a convention, meeting or other business purpose. In fiscal year 2019, the Visit San Antonio sales staff booked over 944,000 room nights for current and future years. Significant meetings booked as of the date hereof included: American Urological Association with a total of 47,600 room nights for 2024; Future Business Leaders of America with a total of 33,233 room nights for 2026; San Antonio Breast Cancer Symposium with a total of 27,600 room nights for 2030 and National School Boards Association with 23,855 room nights for 2026. In addition, Visit San Antonio will continue to be proactive in attracting convention business through its management practices and marketing efforts.

The following table shows both overall performance as well as convention activity hosted by Visit San Antonio for the calendar years indicated:

Calendar Year	Hotel Occupancy [1]	Revenue per Available Room (RevPAR) [1]	Room Nights Sold [1]	Convention Attendance [2]	Convention Room Nights [2]
2010	59.3	57.02	7,768,002	535,400	736,325
2011	61.3	58.08	8,236,019	499,171	637,593
2012	63.5	60.79	8,651,826	449,202	635,829
2013	63.1	63.44	8,610,676	712,577	734,190
2014	64.9	67.32	8,817,338	652,443	725,333
2015	65.7	69.55	8,913,575	699,662	773,569
2016	65.9	71.12	9,116,363	637,658	676,501
2017	66.0	73.45	9,268,201	823,561	816,582
2018	67.1	77.88	9,568,119	672,288	882,650
2019	67.4	75.98	9,989,643	605,093	766,259

[1] Data obtained from Smith Travel Research based on hotels in the San Antonio selected zip code reports dated January 2020 (reporting 2019 numbers), and historical annual reports for prior years.
[2] Reflects only those conventions hosted by Visit San Antonio.
Source: Visit San Antonio

Military Industry

The growth in new missions and significant construction activities brought about by Base Realignment and Closure ("BRAC 2005") strengthened San Antonio's role as a leading military research, training, and education center. One of the major outcomes of BRAC 2005 was the creation of Joint Base San Antonio ("JBSA") which is the largest joint base in the DoD. JBSA consolidates all the base support functions, real property, and land for JBSA-Lackland, JBSA-Randolph, and JBSA-Fort Sam Houston (including Camp Bullis) under the 502nd Air Base Wing. JBSA includes over 46,500 acres, supports over 80,000 personnel, has a plant replacement value of $30 billion, and an annual budget of $800 million. Over 138,000 personnel are trained at JBSA facilities every year. In addition, JBSA currently has approximately $275 million in Military Construction ("MILCON") projects underway making it the largest MILCON program in the Air Force.

JBSA and its 266 mission partners represent a significant component of the City's economy providing an annual economic impact, when combined with other DoD contracts and contractors, military retirees, veterans, and direct and indirect jobs, of over $16 billion for the City and approximately $30 billion to the State of Texas. In addition, the property of the former Brooks Air Force Base ("Brooks AFB"), a fourth major military installation, was transferred from the U.S. Air Force to the City- created Brooks Development Authority ("BDA") in 2002 as part of the Brooks City-Base Project. Furthermore, the military is still leasing over 1.7 million square feet of space at Port San Antonio (the "Port"), which is the former Kelly Air Force Base that was closed in 2001.

One of the other significant events brought about by BRAC 2005 is the realignment of medical facilities resulting in a major positive impact on military medicine in San Antonio, with $3.2 billion in construction and the addition of approximately 12,500 jobs at the JBSA complex. Currently, Brooke Army Medical City ("BAMC") continues to play a critical role in patient care, graduate medical education and research, as well as caring for wounded military service members, and civilian members of the community. Along with other institutions, BAMC provides support to 22 counties in Southwest Texas, covering over 26,000 square miles, including the City, and servicing over 2.2 million people.

Regarded as one of the top medical facilities in the DoD, BAMC benefits the community by serving as an additional tertiary referral center to care for the most critically wounded and complex patients without concerns for payor status. The bulk of BAMC's funding for civilian trauma patients comes from the Secretary of the Army's Designee Program. In addition, approximately $2.5 million annually is funded through the Uncompensated Trauma Care Grant administered by the Texas Department of State Health Services. BAMC's health professionals retain a high degree of medical/combat readiness by the experience they gain treating the large volume of complex trauma patients from the community. This experience replicates the same type of casualties that are encountered in combat.

In addition, BAMC trains future providers to go to war. Over 600 physicians are trained/educated through Graduate Medical Education ("GME") programs. Every year, nearly 900 medical students are trained at BAMC in the areas of trauma, orthopedics, ophthalmology, emergency medicine, and otolaryngology. In addition, over 1,200 participants graduate annually from various allied health programs at BAMC. This center is the nation's premier military training platform to prepare military healthcare professionals to provide life-saving combat medical care.

JBSA-Fort Sam Houston. JBSA-Fort Sam Houston is engaged in military-community partnership initiatives to help reduce infrastructure costs and pursue asset management opportunities using military facilities. In April 2000, the U.S. Army entered into a partnership with the private organization, Fort Sam Houston Redevelopment Partners, Ltd. ("FSHRP"), for the redevelopment of the former BAMC and two other buildings at Fort Sam Houston. These three buildings, totaling about 500,000 square feet in space and located in a designated historic district, had been vacant for several years and were in a deteriorating condition. On June 21, 2001, FSHRP signed a 50-year lease with the U.S. Army to redevelop and lease these three properties to commercial tenants.

Some of the major mission partner organizations on JBSA-Fort Sam Houston are: U.S. Army North, the Army Installation Management Command, the Army Medical Command, U.S. Army South, the Army Medical Department and School, the Regional Health Command-Central, BAMC, the Medical Educational and Training Campus, the Mission and Installation Contracting Command, the Naval Medical Forces Support Command, three Army Reserve Depots, a Navy/Marine Reserve Operations Center, and a Texas Army National Guard armory.

The potential economic impact from JBSA-Fort Sam Houston due to the BRAC 2005 expansion, along with major growth from the Army Modular Force and Army Grow the Force programs, is estimated at nearly $8.3 billion. The economic impact due to the amount of construction on post to accommodate the new mission accounts for approximately 80% of the impact ($6.7 billion). While the major surge of construction from BRAC 2005 and the other major force programs are complete, the economic impact from JBSA-Fort Sam Houston will increase by nearly $1.6 billion annually with additional annual sales tax revenue of $4.9 million. The major personnel moves under BRAC 2005 were completed by September 15, 2011, and this increase in personnel and missions at JBSA-Fort Sam Houston supports the employment of over 15,000 in the community.

Various construction projects continue or have been completed at JBSA-Fort Sam Houston. The new Walters Street Gate and Entry Control Point and a new Medical Education and Training Campus Headquarters Building have been completed. A new Student Activity Center opened in November 2013 and construction was completed on a new BAMC Visitor Control Center and Entry Control Point in January 2014. A new 310-room hotel was completed in October 2014, and a new 192-room apartment style dormitory broke ground in 2016 and was completed in early 2018. A small addition to the hospital for a hyperbaric chamber was completed in June 2017 and a new two-story Army-Air Force Exchange Services Exchange Main Store is planned for completion by Spring 2020. In 2016, the United Service Organization ("USO") in partnership with JBSA, completed a new all-service facility located in the Sam Houston Community Center. New construction includes a Combat Medic Lab Instructional Building (the "Lab") replacing a 1940's facility. The Lab trains combat medics—a daily average of 180 students. Mission growth saw five new organizations whose cyber and medical missions brought approximately 305 new positions to the base.

JBSA-Camp Bullis. Armed Forces medics and Corpsmen at JBSA-Fort Sam Houston receive additional field training at JBSA-Camp Bullis, which comprises 28,000 acres. JBSA-Camp Bullis is also used by the 37th Training Wing for Security Forces technical and professional development training. Additionally, JBSA-Camp Bullis is home to the United States Air Force (USAF) Medical Training Readiness Center, which encompasses four medical-related courses. It is also home to multiple Army Reserve and Army National Guard units of all types, to include Military Intelligence, Engineer, Medical, Infantry and Special Forces. The 470th Military Intelligence Brigade, headquartered at JBSA-Fort Sam Houston, operates the United States Army Intelligence and Security Command Detention Training Facility at JBSA-Camp Bullis, and the Defense Medical Readiness Training Institute operates the Combat Casualty Care Course. JBSA-Camp Bullis also supports regular use by local law enforcement agencies and Federal entities. Between 2013 and 2016, JBSA-Camp Bullis supported the training of approximately 550,000 personnel. Because of its geographical size, numerous units and missions are continually looking at JBSA-Camp Bullis as a viable place to locate and train. An $18.5 million-dollar MILCON project for a new 36,000 square foot dining facility, which will serve approximately 370,000 meals a year, was deferred as some of the funding was diverted from the DoD FY20 budget.

JBSA-Lackland. JBSA-Lackland is home to the 37th Training Wing, situated on 9,700 acres, all within the city limits of San Antonio. According to a recent Economic Impact Analysis, over 53,000 military personnel, civilians, students, contractors, and military dependents work, receive training, or utilize JBSA-Lackland services. JBSA-Lackland hosts the Air Force's only Basic Military Training ("BMT") function for all enlisted Airmen, which is known as the "Gateway to the Air Force". Additionally, JBSA-Lackland hosts many of the technical training courses which the BMT graduates are routed to prior to their first assignment. On an annual basis, JBSA-Lackland is expected to graduate 86,000 Airmen and international students. The Air Force is in the middle of a $900 million program to replace the BMT Recruit Housing and Training buildings that have been in continuous operation since construction in the late 1960s. Construction is now complete for four of the Airmen Training Complexes ("ATC") and the first two Dining/Classroom Facilities ("DCF") that support the ATCs. Construction is also complete for the Pfingston BMT Reception Center, every new recruit's entry into BMT. The beginning of the second half of the BMT Complex replacement program began in fiscal year 2019 with the start of the fifth ATC and the third DCF. Each ATC will house up to 1,200 trainees and the DCF includes dining halls and classroom facilities for two ATCs. The BMT replacement program is estimated to be complete by fiscal year 2020. The City of San Antonio is supporting these efforts by building a third entry (deceleration) lane into JBSA-Lackland. This ongoing project will support over $600 million in new construction over the next 10 years. The deceleration lane was JBSA's number one funding priority and will support the transit of approximately 100 heavy trucks a day for the duration of these projects. In addition, construction of the lane will reduce wear and tear on both City and JBSA streets while minimizing traffic congestion outside the base, enhancing overall safety for both military members and the community.

Projected growth could also come in the form of the previous merger of 24th Air Force (cyber focus) and the 25th Air Force (intelligence, surveillance, and reconnaissance focus) into the 16th Air Force. Previous projections included a 160,000 square foot expansion of the building housing personnel and operations of the former 24th Air Force and a potential increase of 1,500 students at the Defense Language Institute English Learning Center. The 16th Air Force continues to refine its "campus plan" with the desire to replace its complex of buildings constructed in the 1950s through the early 1970s. The "campus plan" will consider the consolidation of personnel and operations in the former 24th Air Forces building, on what is now former Kelly Air Force Base, into new MILCON facilities that will also replace the current 16th Air Force building complex. The Transportation Security Agency's Canine Academy headquarters opened in March 2016.

Adjacent and contiguous to JBSA-Lackland is the Port, where the Air Force maintains a significant presence. The Air Force and the Port jointly utilize the Kelly Field runway for military and commercial airfield operations. The Air Force continues to lease over 30 buildings, which consist of 1.75 million square feet of space and over 270 acres. The largest Air Force leaseback is at Building 171, a 460,000 square foot facility previously closed from the 1995 Base Realignment and Closure of Kelly AFB. Approximately 7,000 Air Force and other DoD employees work at this and other facilities on the Port in this post-BRAC 2005 era. Recently approved funding from the federal MILCON program and the state of Texas' Defense Economic Adjustment Assistance Grant will result in the replacement of the aging, non-compliant Kelly Air Traffic Control Tower, and upgrade and renovation of an aging hangar and operations facilities. These much-needed infrastructure improvements will support C-5 and F-16 training missions.

Much of the new BRAC 2005 growth which occurred on the Port property is at Building 171. The Air Force spent $26.5 million to renovate the building, which houses 11 missions. Seven missions and approximately 800 personnel have relocated to the building from Brooks. These include the Air Force Civil Engineer Center, four medical missions including the Air Force Medical Operations Agency, and other support missions. Building 171 also houses the personnel and mission of the former 24th Air Force that is now conducted under the newly-created 16th Air Force consisting of approximately 450 personnel and the Air Force Real Property Agency.

In the near future, eight new organizations are expected to bring approximately 660 new positions to JBSA-Lackland. These new personnel will perform cyber, flight and technical, and training missions. Part of this growth has already taken place. In October of 2018 the Secretary of the Air Force announced that JBSA would be home to the Special Warfare Training Wing ("SWTW") bringing 135 new jobs to the area and significantly enhancing the base's military value. Part of the FY20 Defense Appropriations Bill included $69 million for a new aquatics tank to support the SWTW mission.

JBSA-Randolph. JBSA-Randolph, which is known as "the Showplace of the Air Force" because of its consistent Spanish Colonial Revival architectural standard retained from when the installation was first constructed in the early 1930s, is on the northeast side of San Antonio and houses the Headquarters Air Education and Training Command ("AETC") and the Air Force Personnel Center ("AFPC"). Other major tenant organizations include the Air Force Manpower Agency, 19th Air Force, the Air Force Recruiting Service, and the Air Force Office of Special Investigations (Region 4). The main operational mission is carried out by the 12th Flying Training Wing (the "Wing") which equips and trains aviators and supports worldwide contingency operations. The Wing operates parallel runways on either side of the main installation facilities and conducts 24-hour-a-day flight training operations. In a related aviation mission, JBSA-Randolph, which, in 2017, added 85 instructors and staff to its Remotely Piloted Aircraft ("RPA") training unit, produces RPA pilots to man an Unmanned Aerial Systems ("UAS") force which now encompasses 8.5% of total Air Force pilot manning. The UAS force grew by approximately 25% between fiscal year 2013 and fiscal year 2017. New construction includes a commercial gate which replaces a non-compliant gate in the airfield clear zone. This new gate will support commercial vehicle entry and be compliant with force protection measures. New organizations will see 30 new positions supporting the base's flight training mission. The FY20 Defense Appropriations Bill provides $36 million in MILCON for a replacement AFPC B-Wing building, and a total of nearly $20 million in MILCON for buildings to support T-X ground-based flight simulators and T-X aircraft maintenance training facilities. The T-X is also referred to by its nomenclature of T-7 Red Hawk; it is the Air Force's next generation training aircraft that will replace the T-38 Talon.

The BRAC 2005 growth supported the City's economic development strategy to promote development in targeted areas of the City, to leverage military installation economic assets to create jobs, and to assist the City's military installations in reducing base support operating costs.

San Antonio is home to two large projects which serve all of the military branches. The Audie L. Murphy Veterans Administration Hospital, which includes a new $67 million Level I Polytrauma Center, was completed in 2011. This hospital is designed to be the most advanced in the world and is capable of providing state-of-the art medical care to veterans with multiple serious injuries. San Antonio is also home to the National Trauma Institute ("NTI"), a collaborative military-civilian trauma institute involving BAMC, University Hospital, the UT Health Science Center, and the U.S. Army Institute of Surgical Research ("USAISR"). The NTI coordinates resources from the institutions to most effectively treat trauma victims and their families.

In 2005, the San Antonio community established communication/partnership forums to assist the military with BRAC 2005 and other military-related issues. The Military Transformation Task Force ("MTTF") is a City, Bexar County, and business community organization which provide a single integrated forum where senior military commanders address their challenges and requirements to the community.

In January 2007, the City established the Office of Military Affairs ("OMA") as the single point of contact for the City on military and veteran related issues. In 2018, OMA formally changed its name to the Office of Military and Veterans Affairs ("OMVA"). The mission of OMVA is to work with the military to sustain and enhance mission readiness, develop and institutionalize relations to strengthen a community-military partnership, and to provide an official formalized point of contact for the military and veteran community on issues of common concern. OMVA is working with the MTTF Tri-Chairs to refocus the MTTF by updating and codifying its mission, vision, membership, leadership, chain of command, branding and measures of effectiveness.

For the past three years, OMVA has aggressively pursued partnerships with JBSA to preserve and increase military missions, protect military installations, and improve the City's military-friendly environment for the military and veteran community. OMVA advocates on behalf of the military at the local, state and national level. Through advocacy and close relationships with JBSA leadership, OMVA has advocated for, and been successful in securing numerous infrastructure projects supporting JBSA. This tangible support, which has included funding through the City's bond program, state funding, and other sources, has resulted in $105 million dollars in both bond and City operating budget projects since 2007. These projects have been mutually beneficial for both the City and the military and added military value to the region's installations---military value has been part of the scoring criteria in previous BRACs.

OMVA works closely with the military to address compatible land-use issues around the installations in order to enhance mission readiness. This includes testifying at committee hearings before the Texas Legislature during the year and at their biennial sessions. During the 85th Texas Legislative Session, OMVA, along with local and state elected officials, was successful in ensuring the establishment of a five-mile protection buffer against encroachment around all Texas military installations. This same team effort was applied during the 86th Texas Legislative Session to maintain this five-mile buffer. OMVA also assists the Mayor with the Commission on Veterans Affairs. Chartered in 2001, this eleven-member board serves the Mayor and ten City Council districts in an advisory capacity focused on all veteran issues within the community.

In 2008, OMVA introduced the Growth Management Plan as one of the responses to the growth brought about by the BRAC 2005 actions, and it clearly laid out the partnership between the San Antonio community and the military. One example of the partnership is the City's effort to gather over $105 million in resources and funding from bond proceeds, City funding, federal earmarks, and grants to provide significant infrastructure improvements around Fort Sam Houston. The premier project was the reconstruction and widening of Walters Street, a primary entrance to Fort Sam Houston. This project was substantially completed in June of 2013. This project was complex, since it was the center segment of a cooperative effort joining the already completed Texas Department of Transportation ("TxDOT") improvements on IH-35 to a new, high security gate entrance that was completed at Fort Sam Houston. An even more unique project is the City's construction of a much-improved bridge over Salado Creek on Binz Engleman Road, which was actually built on federal property and was gifted to the military upon completion in June of 2012. Other key projects included intersection improvements on Harry Wurzbach Road between the JBSA-Fort Sam Houston Gate and Rittiman Road, and the construction of a new bridge on Rittman Road, west of IH-35. The City also expended significant funding to support development along Walters Street by improving utilities, installing a new water line, and improving numerous side streets in that area. These improvements are now complete. The City was also selected by the DoD's Office of Economic Adjustment to receive an award of $25 million in federal funds to construct new ramp connectors between IH-35 and Loop 410 near BAMC. This project is under construction. This initiative with TxDOT will greatly improve traffic flow and safety for personnel seeking access to the medical facility area. Finally, the City and JBSA entered into an Intergovernmental Support Agreement ("IGSA") in late 2018 through which JBSA can leverage the City's existing roadway facility contracts to provide pavement repair services across JBSA's installations. A pilot project was completed on JBSA-Ft. Sam Houston in 2019 and saved the government $52 thousand dollars. This particular IGSA is expected to be amended in 2020 to allow the City to support more complex roadway repairs for JBSA.

On March 24, 2017, the United States Patent and Trademark Office granted San Antonio the trademark Military City, USA. The trademark was a result of a year-long process to ensure that no other city had previously met the criteria. For over 300 years, San Antonio has had a rich military history. The moniker Military City, USA became most prominent after World War II. During this time, five military installations operated in San Antonio and the surrounding areas. The trademark emphasizes San Antonio's rich military history and honors approximately 250,000 veterans.

Currently, DoD is the community's largest employer, supporting the employment of over 805,685 people, with an economic impact of approximately $101 billion to the Texas economy. JBSA alone directly employs 282,995 people and has a total economic impact of $47 billion in payroll, contract expenditures, and value of jobs created. Over 250,000 veterans reside in San Antonio and receive over $1.5 billion in annual benefit payments. The BRAC 2005 program in San Antonio concluded in 2011, but the construction momentum continues.

Aerospace

According to the Economic Impact Study commissioned by the Greater San Antonio Chamber of Commerce in 2018, aerospace is a $3.4 billion industry in San Ay that it would be increasing its San Antonio workforce, creating 100 jobs.

IT and Cybersecurity

The information technology industry ply 30 jobs, and add 10 jobs for a total of at least 40 jobs.

Advanced Manufacturing

Toyota Motor Corporation, one of the largest manufacturing employers in San Antonio with an estimated workforce of over 3,000, expanded its local production in 2010, adding the production of the Tacoma truck at its manufacturing facility in San Antonio. Toyota shifted its Tacoma manufacturing from Fremont, California to San Antonio, creating an additional 1,000 jobs and investing $100 million in new personal property, inventory, and supplies. Toyota and its 23 on-site suppliers, located on San Antonio's south side, support Toyota's production of Tundra and Tacoma vehicles, generating an estimated annual impact of $1.7 billion. In 2019, Toyota announced another $391.8 million investment in the San Antonio plant, which will include new technology brought to the manufacturing line. This will allow the plant to be more flexible to meet market demand.

Navistar International Corporation, a publicly traded manufacturer of semi-trucks, construction trucks, school buses and diesel engines for several automobile manufacturers announced in October 2019, their intention to build a manufacturing plant in San Antonio. This project will help expand the manufacturing capacity of the company, as well as complement other manufacturing facilities and operation in the region. The company intends to invest $235 million into the project and create 598 new full-time jobs over the next four years. It is estimated that the project will bring in over $5 billion in economic impact to the region over the next 10 years.

Brooks continues to foster the development of its business and technology center on the south side of San Antonio through its aggressive business attraction and retention efforts. Recognized as one of the most innovative economic development projects in the United States, Brooks is a 1,308-acre community with approximately 350 acres available in undeveloped land. In June 2018, Brooks began work on a 350,000-square foot light industrial facility to help attract developers of various goods. This new facility will help increase the appeal of Brooks as a hub for the advanced manufacturing industry, one of San Antonio's prominent target industries. Total economic activity attributed to businesses located in the Brooks campus supported over 3,300 jobs in 2019.

Nissei Plastic Industrial manufacturers is a Japanese company that specializes in large scale injection molding machinery. During a trade mission to Japan in 2014, this company was engaged as they showed interest in expanding to the U.S. After a visit to San Antonio, the company acquired nine acres of land at Brooks to establish a manufacturing and assembly facility to serve the and Mexico markets. The grand opening of the new assembly plant took place on May 14, 2018.

New Energy

In response to an April 2009 request for proposal, CPS negotiated and entered into a 30-year Power Purchase Agreement ("PPA") with TX Solar I, LLC to construct a clean, dependable, and renewable energy solar farm in San Antonio and Bexar County, known as the "Blue Wing Solar Energy Generation Project". The project consists of 214,500 ground-mounted thin film panels manufactured by First Solar with an annual generation of about 14 megawatts ("MWs"). This project created approximately 100 green jobs during the construction and operation phases with a capital investment of approximately $41.59 million in real and personal property. The site is located southwest of the City near the intersection of IH-37 and U.S. Highway 181. In 2017, the Blue Wing Solar Energy Generation Project produced over 22,000 megawatt hours through solar energy generation.

In June 2010, CPS and UTSA announced a ten-year, $50 million agreement to position San Antonio as a national leader in green technology research. The agreement established the Texas Sustainable Energy Research

Institute at UTSA. This research institute works with other academic and research entities with robust green programs including the Southwest Research Institute as well as the Mission Verde Center, a City partnership that includes the Alamo Colleges and the Texas A&M University Texas Engineering Experiment Station. The institute also has an active military establishment looking to address specific energy needs. In 2019, UTSA announced that through the partnership with CPS, three new projects totaling approximately $750,000 would begin, focusing on improving grid security and resilience, solar energy generation and more efficient technology for power generation.

In 2011, CPS, the largest municipally owned, vertically integrated electric and gas utility in the United States, invested in 400 MW of solar energy through PPAs and launched a New Energy Economy ("NEE") in the City. The NEE is comprised of local companies that share the City's vision for clean energy, innovation, and energy efficiency while leveraging economic development. Through this strategic approach, the City has spurred the creation of a solar manufacturing and clean energy technology hub. As a result, the NEE has led to more than $1.4 billion in annual economic impact, over 900 jobs, and over $200 million in capital investment, while contributing towards education locally. Additionally, more than $23 million for local education programs, with a primary focus on science, technology, and engineering, has been committed by NEE partners. To continue this effort, CPS launched Energy Partnerships Innovation ("EPIcenter") in 2015, a hub for clean energy technology innovation, education and community engagement, and entrepreneurial incubation and ideation. In early 2018, EPIcenter announced the first two companies to join its new energy incubator, San Antonio-based Go Smart Solar and Morton Gestalt. In the last quarter of 2018, EPIcenter announced that Drones of Prey, an Austin based startup, would also be joining the incubator, adding the first company not based in San Antonio to its rank. Since the incubator opened in December 2017, EPIcenter has assisted 17 startups. The incubator is designed to help entrepreneurs build and develop innovative business ideas in the new energy industry.

On December 13, 2012, City Council designated Brooks as a reinvestment zone in accordance with State statute to contribute to the retention and expansion of primary employment and attract major investment in the zone. Mission Solar has decided to locate its solar panel manufacturing operations and its U.S. corporate headquarters at Brooks. Mission Solar has also agreed to support the creation and sustainment of a renewable energy and advanced manufacturing workforce through a $350,000 contribution to the Alamo Colleges to continue its efforts to develop a customized curriculum and training program to support the development of a renewable energy workforce.

Inner City Development

Development in the inner city has strengthened considerably in recent years, with many catalytic projects underway or recently completed. The new 24-story Frost Tower was completed as Frost Bank employees moved in June 2019. Extensive renovations are occurring at the Light and Print buildings, the new CPS headquarters, the Grant and Kress buildings, Travis Park Plaza, the Milam Building, and Historic City Hall. These projects will soon be joined by The Soto, a mass-timber office building under construction on lower Broadway, the new federal courthouse, and the expansion of UTSA's downtown campus.

Several residential developments are taking shape in the urban core, many of them supported by the City Council-adopted Center City Housing Incentive Policy ("CCHIP"), which encourages urban-density housing development in targeted growth areas through City fee waivers, SAWS fee waivers, and real property tax reimbursement grants. Construction was recently completed on Encore SoFlo, a 339-unit complex near the intersection of South Flores and Cesar Chavez streets; the '68, the first residential phase of development within Hemisfair; and 120 Ninth Street, located along the Museum Reach. More recently, work has begun on several large-scale residential projects including Heritage Plaza and Augusta Apartments.

Since its inception in 2012, 66 CCHIP agreements have been executed, which will result in nearly 7,200 new housing units in the center city. A revised policy was approved by City Council in December 2018. The new City of San Antonio Fee Waiver Program prioritized projects involving affordable housing, owner-occupied rehabilitation, historic rehabilitation, and business development citywide.

Sources: The San Antonio Chamber of Commerce; City of San Antonio, Economic Development Department and Center City Development Office; Forbes Bureau of Labor Statistics, Economic Development Foundation, University of Incarnate Word, UT Health, UTSA, BAMC, SAMH, Geekdom, Build Sec Foundry, San Antonio Express News, U.S. Bureau of Economic Analysis, Port San Antonio, Brooks.

Growth Indices

San Antonio Average Electric and Gas Customers

For the Month of December	Average Electric Customers	Average Gas Customers
2010	717,109	324,634
2011	728,344	328,314
2012	741,556	330,945
2013	754,893	333,587
2014	770,588	336,367
2015	783,767	337,920
2016	802,712	342,928
2017	819,333	346,247
2018	823,153	348,313
2019	857,559	357,189

Source: CPS.

SAWS Average Customers per Fiscal Year

Fiscal Year Ended December 31	Water Customers [1]
2010	355,085
2011	358,656
2012	362,794
2013	367,388
2014	371,573
2015 [2]	479,100
2016 [2]	486,649
2017 [2]	493,768
2018 [2]	502,024
2019 [2]	511,361

[1] Average number billed, excluding SAWS irrigation customers.
[2] Amounts reflect the merger with SAWS District Special Project ("DSP") effective January 1, 2015.
Source: SAWS.

Construction Activity

Set forth below is a table showing building permits issued for construction within the City at December 31 for the years indicated:

Calendar Year	New Residential Single Family[1] Permits	New Residential Single Family[1] Valuation	Residential Multi-Family[2] Permits	Residential Multi-Family[2] Valuation	Other [3] Permits	Other [3] Valuation
2010	1,982	$295,097,549	154	$186,518,798	10,489	$1,174,710,884
2011	1,650	$245,542,976	270	$205,177,825	10,290	$1,594,888,560
2012	1,993	$323,925,290	226	$302,749,653	11,390	$1,636,131,582
2013	1,902	$336,790,668	268	$320,007,487	9,888	$1,664,008,739
2014	2,290	$407,108,162	252	$501,829,279	11,214	$2,496,182,001
2015	2,161	$408,047,290	263	$500,853,131	11,580	$2,096,065,163
2016	2,150	$409,048,513	219	$408,327,871	19,106	$2,093,010,308
2017	2,421	$453,152,457	196	$505,855,511	18,172	$2,707,666,910
2018	3,337	$556,401,894	161	$387,094,077	19,993	$3,158,550,699
2019	4,034	$414,277,872	227	$469,523,112	20,104	$2,507,754,861

[1] Includes new single family attached and detached projects.
[2] Includes new two-, three- and four-family projects, townhomes, and multifamily apartment complexes. Apartment complexes are permitted per building.
[3] Includes commercial building permits, commercial additions, improvements, extensions, and certain residential improvements.
Source: City of San Antonio, Development Services Department.

Total Municipal Sales Tax Collections – Ten Largest Texas Cities

Set forth below in alphabetical order is total municipal sales tax collections for the calendar years indicated:

	2019	2018	2017	2016	2015
Amarillo[2]	N/A	N/A	$74,177,530	$74,412,781	$74,423,001
Arlington	$120,966,239	$110,482,756	105,600,443	102,892,000	98,718,419
Austin	240,562,938	226,229,104	210,876,619	204,636,966	195,469,522
Corpus Christi[1]	N/A	N/A	N/A	N/A	77,787,653
Dallas	315,186,746	304,963,822	294,218,052	284,659,887	272,645,990
El Paso	95,909,987	90,106,254	85,606,247	83,879,102	81,307,487
Fort Worth	165,687,273	157,699,811	148,352,207	139,042,987	131,705,412
Frisco[1]	90,036,003	87,307,968	81,409,268	74,691,991	N/A
Houston	698,992,969	687,113,410	638,686,093	630,172,429	659,339,722
Plano	88,612,905	89,766,816	83,078,508	78,286,505	77,558,042
SAN ANTONIO	370,289,324	355,904,510	334,238,830	324,561,595	315,346,501
Round Rock[2]	87,293,806	82,944,806	N/A	N/A	N/A

[1] In 2016, the City of Frisco replaced the City of Corpus Christi as the 10th largest city in the State.
Source: State of Texas, Comptroller's Office.
[2] In 2018, the City of Round Rock replaced the City of Amarillo as the 10th largest city in the State.
Source: State of Texas, Comptroller's Office.

Education

As of October 2019, there are 15 independent school districts within Bexar County with a combined enrollment of 319,542 encompassing 62 high schools, 83 middle/junior high schools, 298 early education/elementary schools, 23 magnet schools, and 24 alternative schools. There are an additional 23 charter school districts with 86 open enrollment charter schools at all grade levels. In addition, Bexar County has 99 accredited private and parochial schools at all education levels. Generally, students attend school in the districts in which they reside. There is currently no busing between school districts in effect. The seven largest accredited and degree-granting universities, which include a school of medicine, a school of nursing, a dental school, a law school, and five public community colleges, had combined enrollments of 123,618 for Fall 2019.

Sources: Texas Education Agency; Texas Higher Education Coordinating Board; and Texas Private School Accreditation Commission.

Employment Statistics

The following table shows current non-agricultural employment estimates by industry in the San Antonio-New Braunfels MSA for the period of April 2020, as compared to the prior periods of March 2020 and April 2019, respectively.

Employment by Industry

San Antonio-New Braunfels MSA [1]	April 2020	March 2020	April 2019
Mining, Logging, and Construction[2]	66,400	68,700	66,200
Manufacturing	49,200	52,500	51,000
Trade, Transportation, and Utilities	177,500	183,400	180,500
Information	18,900	19,900	20,500
Financial Activities	92,500	93,200	93,500
Professional and Business Services	130,800	143,300	141,300
Education and Health Services	152,200	167,800	167,200
Leisure and Hospitality	82,400	139,100	138,100
Other Services	32,900	39,800	39,200
Government	175,700	177,000	174,200
Total Nonfarm	978,500	1,084,700	1,071,700

[1] *Based on Labor Market Information Department, Texas Workforce Commission (model-based methodology).* [2] *Mining, Logging, and Construction have been combined compared to previous years.*

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The following table shows civilian labor force estimates, the number of persons employed, the number of persons unemployed, and the unemployment rate in the San Antonio-New Braunfels MSA, Texas, and the United States for the period of April 2020, as compared to the prior periods of March 2020 and April 2019, respectively.

Unemployment Information (all estimates in thousands)

San Antonio-New Braunfels MSA [1]	April 2020	March 2020	April 2019
Civilian Labor Force	1,115.3	1,198.5	1,193.4
Number of Employed	968.5	1,144.4	1,162.1
Number of Unemployed	146.8	54.1	31.3
Unemployment Rate (%)	13.2	4.5	2.6
Texas (Actual) [1]	**April 2020**	**March 2020**	**April 2019**
Civilian Labor Force	12,931.3	14,031.1	13,922.6
Number of Employed	11,244.1	13,312.3	13,505.0
Number of Unemployed	1,687.2	718.7	417.6
Unemployment Rate (%)	13.0	5.1	3.0
United States (Actual) [1]	**April 2020**	**March 2020**	**April 2019**
Civilian Labor Force	155,830.0	162,537.0	162,097.0
Number of Employed	133,326.0	155,167.0	156,710.0
Number of Unemployed	22,504.0	7,370.0	5,387.0
Unemployment Rate (%)	14.4	4.5	3.3

[1] *Based on Labor Market Information Department, Texas Workforce Commission (model-based methodology).*

San Antonio Electric and Gas Systems

History and Management

The City acquired its electric and gas utilities in 1942 from the American Light and Traction Company, which had been ordered by the federal government to sell properties under provisions of the Holding Company Act of 1935. The bond ordinances establish management requirements and provide that the complete management and control of the City's electric and gas systems (the "EG Systems") is vested in a Board of Trustees consisting of five U.S. citizens permanently residing in Bexar County, Texas (the "CPS Board"). The Mayor of the City is a voting member of the CPS Board, represents the City Council, and is charged with the duty and responsibility of keeping the City Council fully advised and informed at all times of any actions, deliberations, and decisions of the CPS Board and its conduct of the management of the EG Systems.

All vacancies in membership on the CPS Board are filled as follows: a nominee to fill such vacancy shall be elected by the majority vote of the remaining members of the Board of Trustees, such majority vote to include the vote of the Mayor. The elected nominee is then submitted by the Mayor to the vote of the City Council for confirmation.

A vacancy in certain cases may be filled by authorization from the City Council. At the expiration of their first five-year term of office, the members of the Board are eligible for re-appointment by election of the other Board members and confirmation by the City Council to one additional term. In 1997, the City Council ordained that Board membership should be representative of the geographic quadrants established by the City Council. New Board members considered for approval by the City Council will be those whose residence is in a quadrant that provides such geographic representation.

The CPS Board is vested with all of the powers of the City with respect to the management and operation of the EG Systems and the expenditure and application of the revenues therefrom, including all powers necessary or appropriate for the performance of all covenants, undertakings, and agreements of the City contained in the bond ordinances, except regarding rates, condemnation proceedings, and issuances of bonds, notes, or commercial paper.

The CPS Board has full power and authority to make rules and regulations governing the furnishing of electric and gas service and full authority with reference to making extensions, improvements and additions to the EG Systems, and to adopt rules for the orderly handling of CPS' affairs. It is further empowered to appoint and employ all officers and employees and must obtain and keep in force a "blanket" type employees' fidelity and indemnity bond (also known as commercial crime bond) covering losses in the amount of not less than $100,000.

The management provisions of the bond ordinances also grant the City Council authority to review CPS Board action with respect to policies adopted relating to research, development, and planning.

Service Area

The CPS electric system serves a territory consisting of substantially all of Bexar County and small portions of the adjacent counties of Comal, Guadalupe, Atascosa, Medina, Bandera, Wilson, and Kendall. Certification of this service area was granted by the Public Utility Commission of Texas (the "PUCT").

CPS is currently the exclusive provider of retail electric service within this service area, including the provision of electric service to some federal military installations located within the service area. In 1999, the Texas Legislature enacted Senate Bill 7 ("SB 7"), which allows for retail electric competition within designated service areas upon a decision of the governing body having jurisdiction within such areas affirmatively acting to "opt-in" to such a competitive scenario. CPS and the City have not elected to "opt-in." Until and unless the City Council and the CPS Board exercise the option to opt-in to retail electric competition (called "Texas Electric Choice" by the PUCT), CPS has the sole right to provide retail electric services in its service area.

The CPS gas system serves Bexar County and portions of the surrounding counties of Comal, Guadalupe, and Medina. In the counties of Kendall, Karnes, Wilson and Atascosa, CPS has gas facilities but currently is not serving any customers. In Texas, no legislative provision or regulatory procedure exists for certification of natural gas service areas. As a result, CPS competes against other gas supplying entities on the periphery of its electric service area.

CPS maintains "Franchise Agreements" with 31 incorporated communities in the San Antonio area. These Franchise Agreements permit CPS to operate its facilities in the cities' streets and public ways in exchange for a franchise fee of 4.5% on electric and natural gas revenues earned within their respective municipal boundaries. Three of the 31 cities have elected to increase franchising fees to 5.5%, with two effective as of February 1, 2015, and the third went into effect January 1, 2018. The additional 1% only applies to customers within those three jurisdictional city boundaries.

Wholesale Power

CPS has an active program to optimize its excess power generation capacity in the wholesale power market, which includes both power purchases and power sales when such can be reasonably expected to reduce cost or generate revenue for the electric system. As a part of managing the power generation portfolio, CPS may also purchase power if there is an unanticipated deficit in capacity, to maintain reserve margins, to enhance reliability for the electric system, or when economically prudent to reduce overall costs of its obligations in the Electric Reliability Council of Texas ("ERCOT") market.

Trained, experienced staff in CPS' Energy Market Operations, who report to the CPS Vice President for Energy Supply and Market Operations, conduct wholesale power transactions in accordance with established procedures. CPS is a Qualified Scheduling Entity ("QSE") within ERCOT which allows CPS to manage both load and generation in the ERCOT real-time and day-ahead markets. The QSE function is also managed by the Energy Market Operations. The governance for ERCOT market activity is established by the Energy Markets and Risk Management Policy. Under this policy, the Energy Portfolio Strategy Committee, comprised of select executive leadership, provides comprehensive review and oversight of proposed wholesale transactions to ensure alignment with CPS strategies, including evaluation of the associated risks. CPS conducts wholesale power transactions only with approved counterparties with which CPS has established master enabling agreements for such transactions. The enabling agreements outline payment and delivery terms and conditions of such sales and purchases, and provide for written confirmation of each transaction between CPS and its counterparts.

CPS sells wholesale electricity to the Floresville Electric Light & Power System, the City of Hondo, and the City of Castroville. These three wholesale supply agreements have been renewed and have terms expiring in 2025, 2022, and 2022, respectively.

Long-term supply agreements have been entered with Central Texas Electric Cooperative, the City of Boerne, the City of Seguin, and the Kerrville Public Utility Board to provide supply for terms that began in June 2013 and extends through 2021 for Central Texas Electric Cooperative and through 2023 for the other three entities. The requirements under the existing wholesale agreements are firm energy obligations of CPS. In addition, from time to time, CPS provides a variety of supply arrangements on a short-term basis for terms ranging from one month up to one year with a variety of approved counterparts.

Customer Rates

CPS' electric and gas monthly rate schedules list the current effective monthly charges payable by CPS customers. Each rate schedule briefly describes the types of service CPS renders to customers billed in accordance with that rate schedule, plus customer eligibility criteria. Customers with similar load and usage characteristics are grouped into rate classes and are billed in accordance with the same rate schedule. The different electric rate classes include rate schedules for residential, commercial, and industrial customers. There are also rate schedules for street lighting, all night security lights, and wholesale power to other electric utilities. The gas rate schedules are categorized into general, commercial, and industrial.

Retail Service Rates

Under the Texas Public Utility Regulatory Act ("PURA"), significant original jurisdiction over the rates, services, and operations of "electric utilities" is vested in the PUCT. In this context, "electric utility" means an electric investor-owned utility ("IOU"). Since the electric deregulation aspects of SB 7 became effective on January 1, 2002, the PUCT's jurisdiction over IOU companies primarily encompasses only the transmission and distribution functions. PURA generally excludes municipally-owned utilities ("Municipal Utilities" or "MOUs"), such as CPS, from PUCT jurisdiction, although the PUCT has jurisdiction over electric wholesale transmission rates. Under the PURA, a municipal governing body or the body vested with the power to manage and operate a Municipal Utility such as CPS has exclusive jurisdiction to set rates applicable to all services provided by the Municipal Utility with the exception of electric wholesale transmission activities and rates. Unless and until the City Council and CPS Board choose to opt-in to electric retail competition, or the Texas Legislature forces CPS into electric retail competition, CPS' retail service electric rates are subject to appellate, but not original, rate regulatory jurisdiction by the PUCT in areas that CPS serves outside the City limits. To-date, no such appeal to the PUCT of CPS' retail electric rates has ever been filed. CPS is not subject to the annual PUCT gross receipts fee payable by IOU electric utilities.

The Railroad Commission of Texas ("RRCT") has significant original jurisdiction over the rates, services, and operations of natural gas utilities in the State. Municipal Utilities such as CPS are generally excluded from regulation by the RRCT, except in matters related to natural gas safety. CPS retail gas service rates applicable to ratepayers outside the City are subject to appellate, but not original rate regulatory jurisdiction, by the RRCT in areas that CPS serves outside the City limits. To date, no such appeal to the RRCT of CPS retail gas rates has ever been filed. In the absence of a contract for service, the RRCT also has jurisdiction to establish gas transportation rates for service to Texas State agencies by a Municipal Utility. A Municipal Utility is also required to sell gas to and transport State-owned gas for "public retail customers", including State agencies, State institutions of higher education, public school districts, United States military installations, and United States Veterans Affairs facilities, at rate provided by written contract between the Municipal Utility and the buyer entity. If agreement to such a contract cannot be reached, a rate would be set by the legal and relevant regulatory body.

The City has covenanted and is obligated under the bond ordinances, as provided under the rate covenant, to establish and maintain rates, and collect charges in an amount sufficient to pay all maintenance and operating expenses of the Systems and to pay debt service requirements on all revenue debt of the EG Systems, including the outstanding Senior Lien Obligations, any Additional Senior Lien Obligations, the outstanding Junior Lien Obligations, obligations arising under liquidity facilities relating to such Junior Lien Obligations, any Additional Junior Lien Obligations, Commercial Paper Notes and Inferior Lien Obligations, and to make all other payments prescribed in the bond ordinances.

CPS has periodic rate increases with the most recent electric and gas base rate increase of 4.25% implemented on February 1, 2014 (the first such rate increase since a 7.5% electric base rate increase and an 8.5% gas base rate increase became effective on March 1, 2010). CPS expects to continue to evaluate electric and gas base rate increases that are intended to maintain debt coverage, debt-to-equity, and liquidity ratios.

Year-after-year, CPS' management team continually monitors and analyzes its cash and revenue positions. Within this process, CPS assesses its projections for actual and anticipated costs and expenses. This information is also used to evaluate the scope and timing of potential requests for rate adjustments. When possible, the CPS team shares this approach with the public to ensure there is general awareness that rate adjustments will be needed from time-to-time. CPS has not needed a rate increase in several years for several reasons, such as a continual focus on cost control and prudent implementation of technology, as well as the effective recovery of its energy efficiency, conservation and fuel costs, including its purchase power agreements and the refunding of revenue bond obligations for debt service savings. At the point CPS' management team determines it is time for a new rate case, a formal and substantiated request will be made to the CPS Board, at a public meeting in open session. When approved by CPS Board, the rate case will continue to be discussed publicly and the request will be presented to the City Council for consideration.

In addition to standard service rates, CPS also provides several rates and riders for a variety of programs and products. Since May 2000, under Rider E15, CPS has offered a monthly contract for renewable energy service (currently wind-generated electricity). The High Load Factor ("HLF") rate, first offered in February 2014, is available to customers with new or added load of 10 MWs or greater. The HLF rate requires eligible customers to maintain an annual load factor of 90% or more and meet the requirements of Rider E16. Rider E16 offers discounts off the Super Large Power ("SLP") and HLF demand charge for a period up to four years for new or added load of at least 10 MW. Under certain conditions, the discount may be extended for up to an additional six years. Eligible customers that qualify for Rider E16 discounts must also meet City employment targets or other related performance metrics and targets for purchases of goods or services from local businesses. Since July 2012, under Rider E19, CPS provides an optional service offering of electricity generated by wind-powered turbines, solar-powered systems, or other renewable resources. Additionally, Rider E20, which became effective February 1, 2015, waives late fees for individuals 60 years or older with income at or below 125% of the federal poverty level. CPS revised its "Rules and Regulations Applying to Retail Utility Service", effective March 1, 2019, which contains provisions for alternative payment plans, payment assistance, extensions, and is now referred to as "CPS Energy Customer Terms and Conditions Applying to Retail Utility Service". The New Service Options ("NSO") tariff, effective October 2018, is an umbrella tariff that enables CPS to offer new service options on a pilot basis, with oversight by the City's Office of Public Utilities. This tariff allows CPS to provide innovative energy services while gauging customer interest and gathering information to refine the offering. The Commercial Electric Vehicle Pilot Rate was the first offering under the NSO tariff.

CPS also has rates that permit recovery of certain miscellaneous customer charges and for extending lines to provide gas and electric service to its customers. The Policy for Miscellaneous Customer Charges is approved periodically by the CPS Board and is subject to a corresponding City ordinance.

In May 2009, the City Council established a mechanism to fund CPS' Save for Tomorrow Energy Plan ("STEP"), an energy efficiency and conservation program to be funded largely through the electric fuel adjustment fee. The total cost of the STEP program during the 2009 to 2020 time period was approved at $849 million with annual costs ranging from $12.3 million to over $111 million. While approximately $9 million a year is currently recovered through existing base rates, the additional costs for the STEP program will be recovered through a STEP surcharge applied to the electric fuel adjustment as stated above. Through fiscal year 2019, the accumulated cost for the STEP program was $640.6 million. As of January 31, 2019, CPS quantified a cumulative reduction of 714 MW. Over the lifetime of STEP, the benefits of the program have exceeded the implementation costs to achieve energy savings. In July 2019, CPS announced that STEP will exceed its original 771 MW reduction goal by the end of FY20, a year early, at a cost that is 15% less than originally forecasted. On January 14, 2020, the Board voted to extend over one year its existing STEP by $70 million, an amount that would allow an additional reduction of 75 MW. With the first initiative nearing a successful completion, CPS is reaching out to the community to solicit input on FlexSTEP, the next generation of energy management programs for its customers. Seeking feedback from a broad array of customers and key stakeholders, CPS will use the information that it gathers to update, design, and create programs and services that meet the needs of its diverse set of customers.

Fuel and Gas Cost Adjustment

The EG Systems' tariffs feature a fuel cost adjustment provision in the electric rates and a gas cost adjustment provision in the gas rates, which allow CPS to reconcile fuel and gas cost variances above or below levels included in base rates. CPS' electric rates are subject to a positive or negative monthly adjustment equal to the variance in the price of fuel above or below a base cost of $0.01416 per kilowatt-hour ("kWh"). Similarly, CPS' base gas rates are subject to an adjustment equal to the variance in the price of natural gas above or below a base cost of $0.220 per 100 cubic feet ("CCF"), approximately equivalent to $2.136 per 1 million British Thermal Unit ("MMBtu"). A British Thermal Unit ("Btu") is a measure of energy content in fuel, and is used in the power steam generation, and heating and air conditioning industries. Natural gas is usually measured in Btus.

Governmentally Imposed Fees, Taxes or Payments

The rates, as previously approved by various rate ordinances adopted by the City Council, may be adjusted without further action by the City Council to reflect the increase or decrease in fees, taxes or other required payments to governmental entities or for governmental or municipal purposes which may be hereafter assessed, imposed, or otherwise required, and which are payable out of or are based upon net revenues of the EG Systems.

In March 2000, two new governmental assessments resulting from regulatory changes in the Texas electric utility industry, including the open access wholesale transmission charges, were added to CPS' electric billings as regulatory adjustments and are updated annually or as needed. The first assessment recovers additional ERCOT related transmission expenditures not recovered through CPS' current base rates. For CPS residential customer rates, this adjustment (effective February 2019) adds $0.00971 per kWh sold. The second assessment relates to CPS' share of the cost to fund the staffing and operation of ERCOT the Independent System Operator ("ISO"), and the quarterly Electric Reliability Organization ("ERO") fee. The PUCT retains oversight authority over ERCOT. For all CPS retail customers, this charge increases bills by $0.00074 per kWh sold.

In March 2005, the RRCT began imposing a regulatory fee to cover the cost of regulation by the RRCT. The fee is based upon the number of active gas customers and is recovered from CPS gas customers through the payment of an annual fee assessed one time during the year.

Transmission Access and Rate Regulation

Pursuant to amendments made by the Texas Legislature in 1995 to the PURA ("PURA95"), Municipal Utilities, including CPS, became subject to the regulatory jurisdiction of the PUCT for transmission of wholesale energy. PURA95 requires the PUCT to establish open access transmission on the interconnected Texas grid for all utilities, co-generators, power marketers, independent power producers, and other transmission customers.

The 1999, Texas Legislature amended the PURA95 to expressly authorize rate authority over Municipal Utilities for wholesale transmission and to require that the postage stamp method be used exclusively for pricing wholesale transmission transactions. The PUCT in late 1999 amended its transmission rule to incorporate fully the postage stamp pricing method, which sets the price for transmission at the system average for ERCOT. CPS' wholesale open access transmission charges are set out in tariffs filed with the PUCT, and are based on its transmission cost of service approved by the PUCT, representing CPS' input to the statewide postage stamp pricing model. The PUCT's rule, consistent with provisions in PURA § 35.005(b), also provides that the PUCT may require construction or enlargement of transmission facilities to facilitate wholesale transmission service.

Additional Impacts of Senate Bill 7 (Deregulation). MOUs and Electric Co-ops are largely exempt from the requirements of SB 7 that apply to IOUs. While IOUs became subject to retail competition beginning on January 1, 2002, the governing bodies of Municipal Utilities and Electric Co-ops have the sole discretion to determine whether and when to opt-in to retail competition. However, if a MOU or Electric Co-op has not voted to opt-in, it will not be able to compete for retail energy customers at unregulated rates outside its traditional electric service area or territory.

SB 7 preserves the PUCT's regulatory authority over electric transmission facilities and open access to such transmission facilities. SB 7 provides for an independent transmission system operator (an ISO as previously defined) that is governed by a board comprised of market participants and independent members and is responsible for directing and controlling the operation of the transmission network within ERCOT. The PUCT has designated ERCOT as the ISO for the portion of Texas within the ERCOT area. In addition, SB 7 (as amended by the Texas Legislature after 1999) directs the PUCT to determine electric wholesale transmission open access rates on a 100% "postage stamp" pricing methodology.

The greatest potential impact on CPS' electric system from SB 7 could result from a decision by the City Council and the CPS Board to participate in a fully competitive market, particularly in light of the fact that CPS is among the lowest cost electric energy producers in Texas. On April 26, 2001, the City Council passed a resolution stating that the City did not intend to opt-in to the deregulated electric market beginning January 1, 2002. However, CPS currently believes that it is taking all steps necessary to prepare for possible competition in the unregulated energy market, should the City Council and the CPS Board make a decision to opt-in, or if future legislation forces municipal utilities and electric co-ops into retail competition.

Strategic Initiatives

In 2008, CPS implemented Vision 2020, outlining CPS' long-term view and focusing on four key objectives: increasing its energy efficiency and conservation efforts; expanding renewable-energy resources; providing cost-competitive electricity; and maintaining its strong commitment to the environment. To ensure achievement of Vision 2020, the following key strategic business drivers were established, along with targets for each: customer relationships, employee relationships, external relationships, operational excellence, renewable / carbon constraints / environment, technology and innovation, and financial integrity. As part of the Vision 2020 Generation Strategy, CPS projects, by 2020, its generation mix to be approximately 25.0% of coal, 25.0% of nuclear, 30.0% of natural gas, 10.0% of wind power, 4.0% of solar power, 5.7% of purchased power and 0.3% of landfill gas. CPS also plans to include 4.0% as part of its generation projection to be met through the STEP program. As strategies and/or market conditions change, these projections may be modified in the future.

In support of CPS' commitment to provide world-class energy solutions to meet the diverse and unique needs of its customers, while acting as an economic engine to drive value and growth in the community, CPS designed a two-year integrated planning process ("CPS Integrated Planning Process") to serve as its roadmap forward.

Through thoughtful leadership, partnerships and CPS' passionate employees, management continues to strategically and successfully evolve its value portfolio to achieve top-tier safety, customer service, electric and gas delivery, generation availability, and financial performance.

The CPS Integrated Planning Process is derived through a deliberately orchestrated cross-functional effort, and aligned with current strategic drivers, risk management and financial planning. Complementary to the CPS Business Plan are business unit plans designed to reinforce CPS' objectives by way of major initiatives, milestones, metrics, targets, and goal alignment. Supporting lowered-tiered metrics, targets, and goals are appropriately cascaded throughout the organization, ensuring a traceable path from enterprise level objectives to business unit goals and to individual performance accountabilities.

CPS' success is measured through operational excellence processes, including reporting, monitoring, and assessing metric trends throughout the year ultimately managing and leading towards goal attainment.

To enhance its relationship with the community and to provide community input directly to the CPS Board and CPS staff, CPS established a 15-member Citizens Advisory Committee ("CAC"). The CAC meets monthly with the primary goal of providing recommendations on utility-related projects and programs to offer a customer perspective on community issues, assist in identifying strengths and offer suggestions for improvement to the organization. Representing the various sectors of CPS' service area, the CAC encompasses a broad range of representation in order to identify concerns and understand community issues. City Council members nominate ten of the 15 members, one representing each City Council district. The other five members are at-large candidates who can reside anywhere within the service territory. The CPS Board approves all members of the CAC and each member can serve up to three two-year terms.

With respect to State and national legislative action regarding competition, CPS continues to participate actively in the legislative process to voice the interests of Municipal Utilities and play an integral part in shaping the new environment in which it will operate. CPS continues to evaluate the price components of the energy services it provides, recognizing that the price for electricity will be a paramount factor for succeeding in a deregulated environment. Cost containment initiatives coupled with additional phases of debt management strategies will continue in the years ahead.

Flexible Path Strategy. In March 2018, CPS announced its *Flexible Path*. The *Flexible Path* is a strategic approach on how CPS will prudently leverage its existing community-owned generation assets to bridge to a future that enables more non-emitting resources such as wind, solar, energy storage and new technology. Through this strategy, CPS will consider its community's energy reliability, customer affordability, security, safety, environmental sustainability and resilience, as priorities it must meet.

As part of ongoing public outreach, CPS has conducted three public input sessions with the Board about the *Flexible Path* and has participated in more than 64 partner meetings to educate local stakeholders on the future of its generation mix. With this in mind, in May of 2019, CPS partnered with Go Smart Solar to operate and maintain 5 MWs of community-owned solar. Through this partnership, solar-paneled covered parking spaces will be constructed throughout the City, a project known as "Big Sun Community Solar".

In June of 2019, CPS announced the *Flex* POWER Bundle. The *Flex* POWER Bundle is a proposed blended energy approach through which CPS will consider adding more incremental capacity of solar, energy storage and natural gas. The *Flex* POWER Bundle is a diversified solution set that recognizes today's renewables alone cannot support all of the community's customers consistently and reliably, 24 / 7 / 365. The possible generation solution will ensure the community has the power to thrive, while maximizing the existing community-owned generation assets, which are powered by gas, coal, solar, wind and nuclear sources.

Both the *Flexible Path* and the *Flex* POWER Bundle will help the community move closer to a practical and cleaner energy footprint.

CPS anticipates implementation of many more programs and strategic partnerships under the *Flexible Path* and the *Flex* POWER Bundle.

Energy Conservation. CPS' programs and activities to assist customers in understanding energy and ways to reduce electric and gas usage include:

- comprehensive suite of energy efficiency programs offering rebates and incentives for residential, commercial, and industrial customers;

- maintaining a secure web site, Manage My Account at https://www.cpsenergy.com/en/customer-support/manage-my-account.html. Using an Internet connection to log in, CPS customers can: access My Energy Portal; view their current bill; view current balance due; view past bills; pay by check or credit card; start / stop / transfer service; sign up for a payment plan; view payment history; view energy usage; update mailing address; update phone number; authorize contacts; set up alert preferences; and manage their profile;

- maintaining a secure web site, named My Energy Portal at https://www.cpsenergy.com/en/customer-support/my-home-billing-acct/my-energy-portal.html. The portal is available through Manage My Account. With a smart meter and the My Energy Portal, customers can see energy usage (both gas and electric) as recently as the day before. Customers are able to: see their monthly bill, as far back as a year; compare energy efficiency to similar "neighbors"; access over 150 energy efficiency tips; set up their own customized energy savings plan; and compare month-to-month energy usage billing and see reasons for a decrease or increase. These additional insights will eventually be available to all customers. CPS has installed more than 1.2 million smart meters as of January 31, 2020;

- maintaining a phone number where customers can obtain conservation and other energy-related information;

- providing a free comprehensive weatherization program for low-income customers at or below 200% of the federal poverty level;

- providing load curtailment programs for commercial and industrial customers;

- providing multiple residential thermostat offerings under My Thermostat Rewards umbrella, that help residential and small commercial customers to save energy and reduce demand at peak times;

- offering a full suite of rebate programs for energy efficiency improvements by residential, small commercial, multi-family and large commercial customers;

- scheduling consumer information exhibits at high-traffic locations such as customer care fairs, special events, and trade shows;

- conducting utility-related presentations for schools, community service organizations, business and professional groups, and home owner associations; and

- making available a free in-person home energy assessment at https://residential.savenow.cpsenergy.com/assessment.

On January 20, 2009, the CPS Board approved a new Sustainable Energy Policy Statement. Centralized power plants, including utility scale solar, and the traditional electric utility business model, are needed now to bridge the gap to the future. However, in the future, more electricity will come from distributed renewable resources and stored energy, and will be distributed on a "smart grid" to customers empowered with the information to better control their own energy cost and consumption. CPS offers rebates for residential and commercial customers who elect to install a "rooftop" solar photovoltaic ("PV") system. In addition to receiving a rebate, these customers currently receive the additional benefit of being placed on net metering, in which the credit value of the energy their system produces is equivalent to the retail value of the energy delivered by the utility. The current net metering program does not include recovery of the utility's costs for maintaining and upgrading its systems. In October 2014, CPS issued the first of two one-megawatt alternating current ("AC") solar Requests for Proposal. Responses to these pilot program requests for proposal were evaluated and two vendors were selected. CPS selected Clean Energy Collective ("CEC"), the world's leading community solar provider, to bring the first "Roofless" community solar pilot project to the City. CEC has since developed a 1.2 MW direct current ("DC") solar PV facility, providing CPS customers the opportunity to own local clean energy generation through the Roofless Solar program. The Roofless Solar program went live August 26, 2016 and is fully subscribed. CPS also selected PowerFin Partners ("PowerFin"), a solar development firm based in Austin and San Antonio, to launch SolarHostSA, a groundbreaking pilot program that allows participants to host photovoltaic systems on their rooftops in exchange for credits on their energy bill. Working under a power purchase agreement with CPS, PowerFin installs and operates up to 5 MW (AC) of rooftop solar on homes and businesses throughout the CPS service territory, offering the community the chance to realize the benefits of local solar at no cost to them. The two new programs, Roofless Solar and SolarHostSA, are marketed to customers under the trademarked name Simply Solar. Beginning February 1, 2016, CPS allocated an additional $30 million of solar rebates for customer-owned PV systems. The rebate extension was designed so the rebate amount would decline at predetermined spending levels. The first $10 million of rebate funds were designated with a rebate of $1.20 per watt, the second $10 million at $1.00 per watt, and the last $10 million at $0.80 per watt. On January 30, 2017, CPS announced its intention to fund an additional $15 million in solar rebates ($9 million for residential and $6 million for commercial projects) allocated for this initiative. The new solar incentive, which took effect April 2017, is at $0.60 per watt, with an additional $0.10 per watt applicable to systems that utilize locally-manufactured components. CPS added an additional $15 million in rebate funds in January 2018 that took effect starting March 2018. On December

3, 2018, CPS initiated another round of solar rebate funding with a new flat incentive of $2,500 for residential systems. An additional $500 is provided for systems utilizing local-made panels. Commercial systems are rebated at $0.60 per watt for the first 25 kW and $0.40 per watt on greater than 25 kW, with another $0.10 per watt for utilizing local-made panels. On January 30, 2020, this program was extended for another year. As of January 31, 2020, 18,006 customers have installed rooftop solar, with 126 MW of capacity.

In connection with CPS' development of a Strategic Energy Plan that includes energy efficiency as well as generation, CPS has committed to STEP. The goal of the STEP program is to save 771 MW of demand between 2009 and 2020. The 771 MW is equivalent to the amount of energy produced by a medium-sized power plant on an annual basis. To put this into perspective, the CPS Spruce1 power plant generates 555 MW and the newest Spruce2 generates 785 MW of electricity. Cumulatively, the STEP program has, since its implementation, saved approximately 833 MW through fiscal year 2020. On May 23, 2016, CPS approved three-year agreements to outsource the delivery of its energy efficiency programs. CPS selected CLEAResult, the nation's largest implementer of energy efficiency programs, to deliver its commercial efficiency programs. CPS selected Franklin Energy Services, a leading implementer of energy efficiency programs for utility, state and municipal clients nationwide and in Canada, to deliver its residential efficiency and weatherization programs. The agreements have expanded the portfolio of program offerings available to customers and increased adoption toward achievement of the STEP goal. On April 29, 2019, CPS approved an eight-month extension of the CLEAResult and Franklin Energy contracts for delivery of services through May 2020.

CPS evaluates and modifies program offerings annually to target the most effective methods for energy reduction. In July 2019, CPS announced that STEP will exceed its original 771 MW reduction goal by the end of FY20, a year early, at a cost that is 15% less than originally forecasted. With the first initiative nearing a successful completion, CPS is reaching out to the community to solicit input on FlexSTEP, the next generation of energy management programs for its customers. Seeking feedback from a broad array of customers and key stakeholders, CPS will use the information that it gathers to update, design, and create programs and services that meet the needs of its diverse set of customers. In line with CPS' *Flexible Path*, the next round of the STEP program is referred to as "FlexSTEP".

On June 8, 2010, CPS committed to partner with the Texas Sustainable Energy Research Institute (the "Institute") at UTSA for sustainable energy research. CPS agreed to invest up to $50 million over ten years in the Institute. From its inception in September 2010 through May 2018, CPS has invested $8.7 million in the Institute. On June 26, 2018, the CPS Board approved funding for four research initiatives to enhance intelligent building energy management, solar forecasting, energy harvesting from roadways, and smart grid security, totaling approximately $0.9 million. Future funding will be determined by the scope of the projects defined by the partnership and will be subject to annual approval by the CPS Board.

Debt and Asset Management Program. CPS has developed a debt and asset management program ("Debt Management Program") for the purposes of lowering the debt component of energy costs, maximizing the effective use of cash and cash equivalent assets, and enhancing financial flexibility. An important part of the Debt Management Program is debt restructuring through the prudent employment of variable rate debt. CPS does not currently use interest rate swaps but continues to assess them as potential debt management tools that could be incorporated into the CPS debt portfolio in the future. The Debt Management Program also focuses on the use of unencumbered cash and available cash flow, when available, to redeem debt ahead of scheduled maturities as a means of reducing outstanding debt. The Debt Management Program is designed to lower interest costs, fund strategic initiatives and increase net cash flow. CPS has a Debt Management Policy, providing guidelines under which financing, and debt transactions are managed. These guidelines focus on financial options intended to lower debt service costs on outstanding debt, facilitate alternative financing methods to capitalize on the present market conditions, optimize capital structure, and maintain favorable financial ratios. Under these guidelines, CPS' gross variable rate exposure cannot exceed 25% of total outstanding debt. Gross variable rate debt as of January 2020, is estimated to comprise approximately 17.9% of CPS' debt portfolio.

CPS management continually evaluates the inventory of all non-core business assets and determines if these assets should be divested for more efficient use.

Additional Generation Opportunities

One of CPS' strongest aspects of operational and financial effectiveness has been the benefit it has derived from its diverse and low-cost generation portfolio. Continued diversification is a primary objective of the CPS management team. Accordingly, this team periodically assesses future generation options that would be viable for future decades. This extensive assessment of various options involves projections of customer growth and demand; technological viability; financial investment requirements, annual asset operation and maintenance costs, environmental impacts; and other factors.

CPS continues to monitor proposed regulatory changes that could raise the costs of operating plants, such as those that have been proposed for units that use carbon-based fuels. To work towards mitigating this carbon-based regulatory risk, CPS management deactivated its two oldest non-scrubbed coal units, Deely1 & Deely2, at the end of 2018 (and whose supply to native load was substantially replaced with the Rio Nogales Plant output). CPS' management is pursuing a multifaceted strategy with the goal of maintaining a well-balanced portfolio, in addition to analyzing traditional generation sources and aggressively growing its renewable energy portfolio as described in the "Generating Capability" table and expanding its efforts towards community-wide energy efficiency and conservation. These mitigation efforts are also referred to as the "5th Fuel" and are very important to CPS' strategic energy plans and specifically to its new generation needs. Additionally, CPS' management has explored and continues to cooperatively develop opportunities with the City Council for potential changes in ordinances, codes and administrative regulations focused on encouraging commercial and residential utility customers, builders, contractors and other market participants to implement energy conservation measures.

CPS annually conducts an assessment of generation resource options to meet its expected future electric requirements. This assessment includes updates to fuel prices, wholesale electric market forecasts and its electric peak demand forecast which incorporates the most recent economic, demographic and historical demand data for the CPS service territory. Additionally, this assessment includes updated demand reductions due to the STEP energy efficiency and conservation program.

Electric System

Power Generation Sources. CPS operates 17 non-nuclear electric generating units, two of which are coal-fired and 15 of which are gas-fired. Some of the gas-fired generating units may also burn fuel oil (diesel), which provides fuel flexibility and greater reliability. CPS also owns a 40% interest in South Texas Project's ("STP") two existing nuclear generating Units 1 and 2. These nuclear units supplied 34.5% of the electric system's native load for the twelve months ending January 31, 2019. The generating plants are normally referred to by the plant name and number (i.e., Sprucel for Spruce unit 1, Braunig3 for Braunig unit, see the "Generating Capability" table below).

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Generating Capability [1]

Plant	Unit	Fuel	Year Installed	Summer Net Max Capability MW[2]	Total Capability MW	
STP (40% interest)[3]	Unit 1	Nuclear	1988	518.0		
	Unit 2	Nuclear	1989	518.0	1,036.0	Nuclear
Spruce Plant	Unit 1	Coal	1992	560.0		
	Unit 2	Coal	2010	785.0[4]	1,345.0	Coal[5]
Arthur Von Rosenberg (NGCC 2x1)	Unit 1	Gas	2000	492.0		
Sommers Plant	Unit 1	Gas / Oil	1972	420.0		
	Unit 2	Gas / Oil	1974	410.0		
Braunig Plant	Unit 1	Gas / Oil	1966	217.0		
	Unit 2	Gas / Oil	1968	230.0		
	Unit 3	Gas / Oil	1970	412.0		
Milton B. Lee West Plant[6]	MBLCT 1[6]	Gas	2004	46.0		
	MBLCT 2[6]	Gas	2004	46.0		
	MBLCT 3[6]	Gas	2004	44.0		
	MBLCT 4[6]	Gas	2004	46.0		
Milton B. Lee East Plant[6]	MBLCT 5[6]	Gas / Oil	2010	48.0		
	MBLCT 6[6]	Gas / Oil	2010	48.0		
	MBLCT 7[6]	Gas / Oil	2010	48.0		
	MBLCT 8[6]	Gas / Oil	2010	47.0		
Rio Nogales Plant[7] (NGCC 3x1)	Unit 1	Gas	2012	785.0	3,339.0	Gas / Oil
Total Capability Owned by CPS					5,720.0	
Renewable Purchased Power Nameplate Capability						
Desert Sky Wind Farm		Wind	2002	168.0		
Cottonwood Creek Wind Farm		Wind	2005	100.5		
Sweetwater 4		Wind	2007	240.8		
Penascal		Wind	2009	76.8		
Papalote Creek		Wind	2009	130.4		
Cedro Hill		Wind	2010	150.0		
Los Vientos		Wind	2012	200.1	1,066.6	Wind
Covel Gardens		Landfill Gas	2005	9.6		
Nelson Gardens		Landfill Gas	2014	4.2	13.8	Landfill Gas
Blue Wing		Solar PV[8]	2010	13.9		
Sinkin 1		Solar PV[8]	2012	9.9		
Sinkin 2		Solar PV[8]	2012	9.9		
Somerset		Solar PV[8]	2012	10.6		
Alamo 1		Solar PV[8]	2013	40.7		
St. Hedwig (Alamo 2)		Solar PV[8]	2014	4.4		
Eclipse (Alamo 4)		Solar PV[8]	2014	39.6		
Walzem (Alamo 3)		Solar PV[8]	2015	5.5		
Helios (Alamo 5)		Solar PV[8]	2015	95.0		
Solara (Alamo 7)		Solar PV[8]	2016	106.4		
CFC Beck (Community Solar) [10]		Solar PV[8]	2016	1.0		
Sirius 1 (Alamo 6)		Solar PV[8]	2017	110.2		
Sirius 2 ("Pearl")		Solar PV[8]	2017	50.0		
Lamesa II (Ivory)		Solar PV[8]	2018	50.0	547.1	Solar PV
Total Renewable Purchased Power Nameplate Capability					1,627.5	
Total Capability including Renewable Purchased Power					7,347.5	

(1) Data as of January 31, 2019.
(2) Summer net max capability reflects net summer rating for CPS owned plants.
(3) Current net summer electric rating (MWe) for CPS' share of STP1 & 2.
(4) Spruce2 generator was replaced in January 2019. The generator has a reactive power limitation that is not expected to impact full loan capability during summer operations, and repairs occurred in the first quarter 2020.
(5) Deely Plant (840 MW capability) was deactivated (mothballed) at the end of calendar year 2018.
(6) "CT" stands for "Combustion Turbine". Plants renamed MBL (Milton B. Lee) CT as of March 6, 2014.
(7) The Rio Nogales Plant was commissioned in 2002 and purchased by CPS on April 9, 2012.
(8) Solar PV capacity is reported on an alternating current (AC) nameplatebasis.
(9) Desert Sky Wind Farm capacity updated to better reflect contracted nameplate capacity after turbine uprate.
(10) Community Solar pilot project "CFC Beck" added to CPS renewable portfolio table to align with other corporate reporting.

Renewable Resources. As of January 31, 2019, CPS' renewable energy capacity totals 1,628.8 MW. CPS has one of the strongest and most diverse renewable energy programs in Texas with a renewable capacity under contract totaling 1,628.8 MW including local solar, West Texas solar, West Texas wind, coastal wind and landfill gas.

As a step in diversifying its energy resource plan, CPS is proactively pursuing renewable energy supplies. CPS is currently receiving renewable energy under several long-term contracts. CPS has two contracts for wind-generated energy from the Desert Sky Wind Project: a 20-year contract for 135 MW and a 15-year contract for 25.5 MW. These contracts were recently renegotiated into one single contract, with a termination date of December 31, 2021, in response to a request from the developer to repower the project with improved equipment. The plant capacity factor will improve, providing CPS with additional MWh at a lower cost per MWh than the original contracts. The term of the new contract remained the same as the original contracts. The repower was completed in August 2018 and also added approximately 10 MW of nameplate capacity. CPS also has a 20-year contract for 100.5 MW from the Cottonwood Creek Wind Farm; a 20-year contract for 240.8 MW from the Sweetwater Wind Farm; a 15-year contract for 76.8 MW from the Penascal Wind Farm; a 15-year contract for 130.4 MW from the Papalote Creek Wind Farm; a 20-year contract for 150 MW from the Cedro Hill Wind Farm; and a 25-year contract for 200.1 MW from the Los Vientos Wind Farm. Recent transmission congestion in South Texas during various seasons has impacted the Cedro Hill and Los Vientos wind farms, resulting in agreed-upon curtailment of these units during periods of negative pricing (a standard procedure).

CPS also has a 15-year contract for a landfill gas-generated energy project totaling 9.6 MW which came on-line in December 2005. Under an additional contract, the Nelson Gardens 4.2 MW landfill gas generation project achieved commercial operation in April 2014.

CPS is growing its solar energy portfolio with a 30-year contract for the 13.9 MW Blue Wing solar energy project, which entered into commercial operation in November 2010; two 25-year contracts for Sinkin 1 and 2, each 9.9 MW which became operational in May 2012 and a 25-year contract for 10.6 MW from the Somerset Solar project, which became operational in August 2012. Sinkin 1 and 2 and Somerset Solar projects comprise what was formally referred to as the SunEdison Project.

In August 2018, renewable energy infrastructure developer Renewable Energy Systems was selected by CPS to construct an innovative solar and energy storage project to be located at Southwest Research Institute and will be the first co-located solar and storage project interconnected at the distribution level within ERCOT. This project broke ground on October 9, 2018 and went online in February 2020. This project has 17,752 solar panels that produce about 5 MW of solar, enough to power approximately 1,000 homes.

CPS executed a Master Agreement with OCI Solar Power for approximately 400 MW from seven facilities. All seven facilities have been or became operational in early 2017. Each individual facility comprising OCI Solar's 401.8 MW has an existing PPA. OCI's Alamo 1 project facility of 40.7 MW achieved commercial operation in December 2013; St. Hedwig (Alamo 2) for 4.4 MW achieved commercial operation in March 2014; Eclipse (Alamo 4) facility at 39.6 MW, achieved commercial operation in August 2014; Walzem (Alamo 3) project at 5.5 MW achieved commercial operation in January 2015. The Uvalde (Helios – Alamo 5) facility at 95 MW became operational at the end of December 2015. The Haskell (Solara – Alamo 7) facility at 106.4 MW became operational in September 2016. The Sirius 1 (Alamo 6), at 110.2 MW in Pecos County, Texas, began producing test energy in late 2016 and became operational in March 2017. At this time, Alamo 6 is one of the largest solar PV plants in Texas. In addition to the PPAs executed under the Master Agreement with OCI, CPS has also executed two separate 25-year PPAs for Project Pearl (50 MW located adjacent to Alamo 6) and for Project Ivory (50 MW located near Lamesa). Project Pearl became operational on October 16, 2017, and Project Ivory, which recently sold to D.E. Shaw Renewable Investments, began commercial operation on December 20, 2018. In March 2017, CPS and OCI executed an Amended and Restated Master Power Purchase and Economic Development Agreement. The original Master Agreement was replaced in order to simplify the agreement and reflect pertinent terms going forward.

CPS receives energy from 1,068.9 MW of wind, 546.1 MW of solar, and 13.8 MW of landfill gas generated energy for a total renewable energy capacity in operation of 1,628.8 MW, thereby exceeding CPS' goal of 1,500 MW of renewable capacity by 2020.

An estimate of 1.0 MW of solar electricity will be produced by CPS's Solartricity Producer Program. The Solartricity Producer Program is a limited pilot project that is currently closed to any new subscribers and is not included in the "Generating Capability" table. Each Solartricity participant has a 20-year contract with CPS. In addition, the pilot "Simply Solar" programs discussed herein, currently constitute approximately 6 MW of solar capacity. When including these pilot programs, CPS' renewable portfolio capacity increases to 1,635.8 MW. These new programs are not currently included in the "Generating Capability" table.

Nuclear. Nuclear is CPS' other base energy option, providing about 25.4% of CPS' total net annual generation for the twelve months ending January 31, 2019. The South Texas Project ("STP") is a two-unit nuclear power plant with Unit 1 and Unit 2 (or "STP1 and STP2") having a nominal output of approximately 1,318 MW each. STP is located on a 12,220-acre site in Matagorda County, Texas, near the Texas Gulf Coast, approximately 200 miles from San Antonio. CPS currently owns 40% of these units. Participant Ownership ("Participants") in STP1 and STP2 and their shares therein are as follows:

Ownership
Effective February 2, 2006 [1]

Participants	%	Nameplate MW (approximate)
NRG Energy, Inc. ("NRG")	44.0	1,160
CPS	40.0	1,054
City of Austin-Austin Energy	16.0	422
	100.0	2,636

[(1)] In 2006, Texas Genco, holder of a 44% interest in STP, was acquired by NRG. NRG holds its interest in STP1 and STP2 in NRG South Texas LP, a wholly owned subsidiary of NRG.

STP is maintained and operated by a non-profit Texas corporation ("STP Nuclear Operating Company" or "STPNOC") financed and controlled by the owners pursuant to an operating agreement among the owners and STPNOC. Currently, a four-member board of directors governs the STPNOC, with each owner appointing one member to serve with the STPNOC's chief executive officer ("CEO"). The STPNOC Board of Directors selected Tim Powell as the Interim CEO and President on January 11, 2018. On August 20, 2018, STPNOC announced that Mr. Powell assumed the role permanently. All costs and output continue to be shared in proportion to ownership interests.

On February 9, 2017, STPNOC received a final significance determination notice from the Nuclear Regulatory Commission ("NRC") concerning a previously identified security-related finding. The NRC concluded the finding was Greater than Green and of low to moderate security significance. The finding was identified during an NRC inspection conducted from October 19 through December 1, 2016. STP took prompt actions to address the finding. Because the finding was characterized as Greater than Green, the NRC determined that STP would be in the Regulatory Response Column of the Reactor Oversight Process Action Matrix. STP successfully completed an NRC follow-up inspection in August 2017. Subsequently, the NRC returned STP to the Licensee Response Column of the Reactor Oversight Process Action Matrix effective October 2017.

NRC, which retains jurisdiction to conduct cybersecurity-related inspections at nuclear facilities, completed a cyber security inspection of STP in October 2017. STP successfully completed this inspection and was the first nuclear facility in the country that received such an inspection.

In September 2017, the NRC approved STPNOC's license renewal applications for STP1 and STP2 that extends the operating licenses to 2047 and 2048, respectively.

During the twelve months ended December 31, 2018, STP1 and STP2 operated at approximately 94.1% and 95.2% of net capacities, respectively.

Under the Nuclear Waste Policy Act, 42 U.S.C. 10101, et seq. ("NWPA"), the Department of Energy ("DOE") has an obligation to provide for the permanent disposal of high-level radioactive waste, which includes used nuclear fuel at United States commercial nuclear power plants such as STP. To fund that obligation, all owners or operators of commercial nuclear power plants have entered into a standard contract under which the owner(s) pay a fee to the DOE of $1.0 mill per kilowatt hour (1M / kWh) electricity generated and sold from the power plant along with additional assessments. In exchange for collecting this fee and the assessments, the DOE undertook the obligation to develop a high-level waste repository for safe long-term storage of the fuel and, no later than January 31, 1998 to transport, and dispose of the used fuel. To date, no high-level waste repository has been licensed to accept used fuel. The National Association of Regulatory Utility Commissioner ("NARUC") has challenged further collection of this fee. On November 19, 2013, the U.S. Court of Appeals for the District of Columbia ruled in favor of NARUC and ordered the DOE to submit to Congress a proposal to reduce the fee to zero until certain conditions are met. While the reporting of volumes will continue, effective May 16, 2014, the rate changed to 0.0 mill per kilowatt hour (0/M/kWh), or no fee.

To-date, the DOE has not accepted used fuel from any domestic commercial nuclear power plant. According to the filings in one recent suit brought against the DOE, at least 66 cases have been filed in the Court of Federal Claims against the DOE related to its failure to meet its obligations under the NWPA by the existing owners or operators of nuclear facilities seeking damages related to ongoing used nuclear fuel storage costs. In early 2016, a federal district court in Washington, D.C. ruled against the DOE, ordering the government to clean up the Hanford Nuclear Reservation in response to NWPA violations. Entergy Nuclear Generation Company ("Entergy") and Boston Edison Company ("Boston Edison") filed suits alleging a $40 million claim before the Court of Federal Claims regarding allegations that the DOE failed to compensate a nuclear energy company for nuclear waste storage fees incurred. In an opinion and order addressing both companies' claims, dated February 14, 2017, the court dismissed Boston Edison's complaint (based on the rationale that such claim was not yet ripe) and dismissed the government's motion to stay discovery related to the Entergy case due to Boston Edison's claim resolution by the court.

On August 31, 2000, in Maine Yankee Atomic Power Company, et al. v. US, the United States Court of Appeals for the Federal Circuit affirmed that the DOE has breached its obligations to commercial nuclear power plant owners for failing to live up to its obligations to dispose of used nuclear fuel. Subsequent to that decision, the DOE has settled with certain commercial nuclear power plant owners and agreed to provide funds to pay for storage costs while the DOE continues to develop a permanent high-level waste repository. In early February 2013, STPNOC, on behalf of the owners of STP, entered into a similar settlement with the DOE. Under the terms of the settlement, the DOE will reimburse STP for certain costs that will be incurred in continuing onsite storage of all of its used nuclear fuel. As with similar settlements throughout the nuclear industry, the terms of the agreement call for the DOE to reimburse for certain costs incurred through December 2013. In early November 2013, STPNOC and its outside counsel received notice from the Department of Justice ("DOJ") that the DOE was offering to extend the terms of the settlement to allow for the DOE to reimburse for costs incurred through December 2016. The settlement extension (addendum) was executed on January 24, 2014, and extended the term of the Spent Fuel Settlement Agreement with the DOE through December 31, 2016. In November 2016, STPNOC and its outside counsel received notice from the DOJ that the DOE extended the terms of the settlement through December 31, 2019. STP anticipates DOE will extend the terms of the settlement through December 2022, in late January or early February 2020. Additionally, in re Aiken County, 725 F.3d 255 (D.C. Cir. 2013), the court ordered the NRC to comply with the NWPA and use available funds to resume consideration of the DOE's Yucca Mountain application as a possible depository. NRC staff concluded the Yucca Mountain to be a safe location, but the DOE must still obtain acquisition rights and complete licensing requirements. On May 6, 2016, NRC issued its final supplement to the environmental impact statement examining the use of the Yucca Mountain as a permanent repository for used nuclear fuel and high-level radioactive waste. After analyzing the potential impacts on groundwater and surface groundwater discharge, the NRC determined all impacts would be "small". The adjudicatory hearing, which must be completed before a licensing decision can be made, remains suspended. On December 16, 2016, the DOE released its "Draft Plan for a Defense Waste Repository", evaluating the possibility of a separate disposal repository (other than the Yucca Mountain). The preliminary plan describes the technical regulatory, risk management, cost, and schedule consideration thereof and remained open for comment until March 20, 2017. In January 2017, the Government Accountability Office issued a report that assessed DOE's analysis of the defense-only repository as excluding major costs "that could add tens of billions of dollars" and including a schedule that "appears optimistic", in light of "past repository siting experiences". Legislation introduced for fiscal year 2019 and fiscal year 2020 did not provide any funds for licensing the Yucca Mountains as a nuclear waste repository.

Until the DOE is able to fulfill its responsibilities under the NWPA (which includes a permanent underground disposal facility), the NWPA has provisions directing the NRC to create procedures to provide for interim storage of used nuclear fuel at the site of a commercial nuclear reactor. Pursuant to STPNOC analysis of NRC guidance, STPNOC constructed an on-site independent spent fuel storage installation ("ISFSI" also known as "Dry Cask Storage") and commenced dry cask loading operations of spent nuclear fuel in January 2019. Expenditures for the spent fuel management project are being funded by the STP owners as the costs are incurred. CPS funds its 40% ownership share of these costs and periodically requests reimbursement from its Decommissioning Trusts for allowable costs.

Annually, STPNOC submits claims to the DOE for the reimbursement of allowable costs for spent fuel management. Allowable costs are returned by STP to the owners upon receipt of funds from the DOE. CPS reimburses the Decommissioning Trusts for the settlement amount received from the DOE. Qualifying spent fuel management costs not reimbursable by the DOE are funded by the Decommissioning Trusts. Any costs not reimbursable by the DOE or the Trusts are recorded as STP operational and maintenance expenses or capital costs.

CPS received reimbursement for certain initial costs related to the Dry Cask Storage project incurred prior to May 1, 2012. A second claim submitted to the DOE under the Spent Fuel Settlement Agreement was submitted on October 31, 2013, and sought reimbursement for covered costs during the period of May 1, 2012 through July 31, 2013. On April 14, 2014, the DOE issued a letter that denied reimbursement for certain costs associated with upgrading the spent fuel dry cask handling cranes. On May 8, 2014, STPNOC agreed to accept the DOE's decision but reserved the right to seek reimbursement for future costs associated with upgrading the cranes. CPS expects that the DOE will render its decision regarding the eligibility for reimbursement of future crane upgrade costs as part of the review process for each annual claim. For those costs that have been deemed, or that in the future may be determined to be non-reimbursable by the DOE, CPS expects to pay these costs using funds currently held in the STP Decommissioning Trusts. CPS received its share of the allowable reimbursement costs from the DOE on August 6, 2014. The third claim with the DOE under the Spent Fuel Settlement Agreement was submitted on October 31, 2014, and sought reimbursement for covered costs during the period of August 1, 2013 through July 31, 2014. In January 2015, $3.2 million was recorded for STP spent fuel management project capital costs. On February 25, 2015, STPNOC received DOE's "Determination Letter" regarding this claim which disallowed reimbursement of certain costs associated with dry cask handling crane upgrades. STPNOC filed a Request for Reconsideration with the DOE on March 27, 2015. On June 25, 2015, the DOE issued a Supplemental Determination letter which determined that a portion of the costs to upgrade the dry cask handling cranes was reimbursable as an allowable cost. CPS received its share of the allowable reimbursement costs from the DOE on August 21, 2015 for the third claim. The fourth claim with the DOE under the Spent Fuel Settlement Agreement was submitted on October 30, 2015 and sought reimbursement for covered costs during the period of August 1, 2014 through July 31, 2015. On March 3, 2016, STPNOC received DOE's "Determination Letter" regarding this claim which disallowed reimbursement of certain costs. On June 13, 2016, CPS received its share of the allowable reimbursement costs from the DOE for the fourth claim. The fifth claim with DOE under the Spent Fuel Settlement Agreement was submitted on October 28, 2016. On February 13, 2017, STPNOC received DOE's "Determination Letter" regarding this claim for reimbursement of certain costs. On June 14, 2017, CPS received its share of the allowable reimbursement costs from the DOE for the fifth claim under the Spent Fuel Settlement Agreement. On April 11, 2018, DOE issued its "Determination Letter" regarding the October 2017 claim from STP. STP accepted the DOE's Determination Letter on April 20, 2018 and payment was received on June 1, 2018. The seventh claim under the Spent Fuel Settlement Agreement with the DOE was submitted in late October 2018 for the period of August 1, 2017 to July 31, 2018. On April 29, 2019, CPS received its share of the allowable reimbursement costs from the DOE. The most recent claim under the Spent Fuel Settlement Agreement with the DOE was submitted in late October 2019 for the period of August 1, 2018 to July 31, 2019 and has been accepted by the DOE for review.

A June 2012 decision by the United States Court of Appeals for the District of Columbia vacated the NRC's waste confidence rule update. In response, the NRC issued an order stating that final approval of licenses dependent on the waste confidence rule, such as new reactor licenses and license renewals (combined construction and operating license application – "COLA"), would not be granted until the court ruling had been addressed. Subsequently, the NRC directed staff to develop a new waste confidence rule and Generic Environmental Impact Statement ("GEIS") by September 2014. In January 2014, the NRC revised the review schedule for the GEIS and to have a new final rule by October 3, 2014. The slight delay in schedule was related to time lost during the government shutdown and lapse of appropriations in October 2013. On August 26, 2014, the NRC approved the GEIS and final rule (renamed the

Continued Storage Rule). In a separate order, NRC approved lifting the licensing suspension once the Continued Storage Rule becomes effective. The rule became effective on October 20, 2014. On September 29, 2014, intervenors filed a petition to suspend the new rule with the Atomic Safety and Licensing Board (a unit of the NRC) and a proposed contention opposing the NRC's action. On February 26, 2015, the NRC issued a decision that rejects the petition, the proposed contention, and the motion to reopen filed by the intervenors in September 2014. On January 28, 2015, the intervenors filed a petition with the NRC to require a reactor-specific environmental impact statement for each license application for a new reactor and license extension (renewal). The NRC issued a decision in April 2015 that denied the petition. On April 24, 2015, the intervenors filed a petition with the NRC to intervene in the STP1 and STP2 license renewal and STP3 and STP4 license application proceedings regarding the Continued Storage Rule. On May 1, 2015, NRC staff responded to the intervenor's hearing request and motion to reopen the record in the license renewal proceeding for STP1 and STP2. The NRC concluded the intervention petition was inadmissible because it raised an issue that was beyond the scope of the proceedings by challenging a NRC rule without requesting a waiver of the rule. Furthermore, the NRC noted that the petition failed to raise a genuine issue of material fact or law and was filed late without good cause. The motion to reopen was deemed inadmissible because it was "untimely without addressing an extremely grave issue", did not address a significant environmental issue, and did not demonstrate that a materially different result would be likely if its proposed new contention had been raised at the beginning of the proceeding. Furthermore, a move to reopen and request to allow "placeholder" contentions to challenge the 2014 Continued Storage Rule and GEIS were denied by the NRC on June 9, 2015.

In late October 2014, the states of New York, Vermont, Massachusetts, and Connecticut filed a timely petition for review of the Continued Storage Rule by the U.S. Court of Appeals for the D.C. Circuit. The NRC issued further guidance in February 2015 determining the Atomic Energy Act ("AEA") does not require a waste confidence safety filing and declined to suspend final licensing decisions. Intervenor-Respondents filed a brief with the D.C. Circuit Court on September 11, 2015 in support of the Continued Storage Rule. Petitioners' reply briefs were due by October 23, 2015. The U.S. Court of Appeals heard oral arguments on February 12, 2016. On June 3, 2016, the U.S. Court of Appeals for the D.C. Circuit upheld the NRC's justification for allowing spent nuclear fuel to be stored on-site at active facilities. Petitions for rehearing were later denied by the court.

Before a commitment is made to construct the next generation facility, CPS management pursues several objectives. These objectives include the pursuit of additional stakeholder input; expanded community education about the long-term energy and conservation needs of the San Antonio community; continued option analyses and evaluations, including CPS' own formalized cost estimates; additional CPS Board approval to move forward; and expanded presentations to the City Council, which governs the related rate increases and bond issuances that may be required to support any generation construction project or existing generation asset purchase. In mid-2006, CPS management directed that staff conduct an initial investigation, study, and analysis of additional nuclear capacity as one type of possible generation infrastructure. In 2007, CPS received CPS Board approval to participate in the early development phase of two additional nuclear projects that involved third-party co-owners. The first possible nuclear project was development of two additional reactors at the STP site, also known as STP3 and STP4. The second possible nuclear project was a proposed new two-unit facility tentatively located in Victoria County, which is also located in south Texas.

In June 2009, CPS management provided the CPS Board its formal assessment and recommendations concerning these options compared to other possible new generation types including the first public estimate of the cost of the first possible project at $13 billion, inclusive of financing costs. Reports of higher cost estimates, however, resulted in reconsideration of the advisability of participating in the STP3 and STP4 Project and, ultimately, in CPS' decision to limit participation in further development of STP3 and STP4. In a settlement negotiated with NRG and the other participants in the development of STP3 and STP4, CPS received a 7.625% ownership interest in the combined STP3 and STP4. CPS is not liable for any STP3 and STP4 Project development costs incurred after January 31, 2010. CPS also received two $40 million installment payments upon award of a DOE loan guarantee to Nuclear Innovation North America LLC ("NINA"), a NRG / Toshiba joint venture. NINA also agreed and has made a contribution of $10.0 million over a four-year period to the Residential Energy Assistance Partnership, which provides emergency bill payment assistance to low-income customers in the City and Bexar County. In August 2015, Toshiba announced that it planned to write down its semiconductor, home appliance, and nuclear business units following an investigation into accounting issues that have resulted in the need for Toshiba to restate their past financial results. On April 25, 2016, media reports indicated the preliminary operating loss after it wrote down the value of Westinghouse nuclear power subsidiary was $6.2 billion. Previously in 2011, NRG announced it had written off its investment in STP3 and

STP4. On October 1, 2015, the NRC issued a press release indicating that NRC staff had completed its Final Safety Evaluation Report (the "report") for the Combined Licenses ("COL") for the proposed STP3 and STP4. The NRC staff provided the report along with the Final Environmental Impact Statement on the application to the NRC for the mandatory hearing phase of the licensing process. The mandatory hearings took place on November 19, 2015, when the NRC staff provided the Final Safety Evaluation Report and Final Environmental Impact Statement on the application to the NRC. On February 9, 2016, the NRC commissioners authorized issuance of the COL STP3 and STP4 and the licenses were issued on February 12, 2016. Prior to the write off, CPS performed a thorough reevaluation of its investment in the STP3 and STP4 to reassess the ongoing viability of the project and the appropriateness of continuing to report the cost of the project on its Statements of Net Position. Despite the project having secured the NRC's authorization for issuance of the COL, in January 2016, CPS concluded that, as a result of sustained changes in a number of environmental and economic factors directly affecting the projected economic feasibility of completing construction of STP3 and STP4, the project experienced a permanent impairment. CPS determined it appropriate to write off the entire $391.4 million investment in STP3 and STP4 and has not performed a re-evaluation since. The impairment loss was reported as an extraordinary item on CPS' Statements of Revenues, Expenses, and Changes in Net Position for the period ending January 31, 2016. This noncash transaction did not impact CPS' debt service coverage ratio; however, there was a resulting increase from 61.1% to 63.7% in the debt to debt and net position ratio at January 31, 2016. Going forward, CPS continues to retain a legal interest in STP3 and STP4.

On May 31, 2018, Toshiba issued a release that provided their notice to withdraw from a project to build two additional advanced boiling water reactors at the South Texas Project. On June 14, 2018, NINA issued a letter to NRC that provided their notification of Intent of Terminate this project (STP3 and STP4) because the project was no longer financially viable. On June 22, 2018, NINA issued a letter requesting NRC approval to withdraw the COL for STP3 and STP4. On July 12, 2018, the NRC issued a letter that approved the termination of the STP3 and STP4 COL. Construction was not initiated for STP3 and STP4, and nuclear materials were never procured or possessed under these licenses. Consequently, STP3 and STP4 are approved for unrestricted use.

STP cancelled all contracts related to NINA, which was established for the purpose of building additional units. On August 13, 2018, NINA provided a draft document to the STP owners, a proposed STP3 and STP4 Assignment and Assumption Agreement and Mutual Release. This agreement essentially returns the site ownership to NRG, CPS, and Austin Energy and restores site ownership and future expansion rights to the original pre-STP3 and STP4 conditions when executed. NINA executed this agreement on October 1, 2018.

Smart Grid Modernization Program. Starting in 2013, CPS began building a converged Advanced Metering Infrastructure ("AMI") and Distribution Automation ("DA") network. The rollout of new electric meters and gas interface management units ("IMUs") using this network began in 2014 in order to reduce operational costs and improve reliability. A new energy portal was implemented to give customers the opportunity to better track and manage their energy usage. The combined cost of the network, electric and gas upgrades is estimated at $290 million. Operational savings, accurate reads, and distribution automation are all factored in the program. Savings are expected to cover the cost in approximately 13 years. As of January 31, 2020, approximately 1.2 million smart grid devices have been installed pursuant to this program. In addition, CPS intends to add a smart meter requirement to its rooftop solar rebate program.

Smart Streetlights. CPS and the City are in the process of soliciting bids from solution providers for smart streetlight controls and smart city use cases. Smart streetlight controls will allow for centralized monitoring and control of streetlights which will improve maintenance planning and increase operational efficiency. The solution will allow for adaptive lighting schedules, provide defective operation notifications, provide GPS locations of streetlights, and provide streetlight failure and status reports.

The smart streetlight platform will be leveraged by the smart city use cases. The City has identified several smart city use cases to pilot which include the following: temperature and air quality monitoring, flood detection, noise detection, and smart parking.

CPS and the City will select the top 3 solution providers to pilot control within the City's 3 Innovation Zones (Downtown, Medical Center, and Brooks City Base) over a 6-month period beginning early December 2019. Pilots will be evaluated for best value for CPS and the City and a deployment strategy will be developed throughout 2020.

On-Demand Resiliency Service. In December 2018, CPS signed an agreement with Enchanted Rock Solutions, LLC to design, install, own, operate and maintain on-site, natural gas-fired backup generator units at customer sites. The units, with no more than 34.8 MW aggregate nameplate capacity, are designed to facilitate On-Demand Resiliency Service for CPS retail customers by providing electricity during outages of the electric system. Under the agreement, CPS is the sole provider of the electricity provided under the resiliency service, the sole provider of natural gas to the operating units, and also provides Qualified Scheduling Entity services to Enchanted Rock. The term of the agreement is 15 years, and CPS has a concurrent agreement with a large retail customer to host the generators and pay a monthly fee for the resiliency service they provide.

Qualified Scheduling Entity ("QSE"). CPS operates as an ERCOT Level 4 Qualified Scheduling Entity ("QSE") representing all of CPS' assets and load. The communication with ERCOT and the CPS power plants is monitored and dispatched 24 hours per day / 365 days a year. Functions are provided from the Energy Market Center housed within the main office of CPS. Backup facilities have also been created. QSE functions include load forecasting, day ahead and real time scheduling of load, generation and bilateral transactions, generator unit commitment and dispatch, communications, invoicing and settlement. The QSE operates in all aspects of the ERCOT Market, including submitting bids and offers in the Day Ahead Market ("DAM"), operating generation and load in the Real Time Market ("RTM"), participating in Congestion Revenue Rights auctions, and offering Ancillary Services into the grid.

Transmission System. CPS maintains a transmission network for the movement of large amounts of electric power from generating stations to various parts of the service area, to or from neighboring utilities, and for wholesale energy transactions as required. This network is composed of 138 and 345 kilovolt ("kV") lines with autotransformers to provide the necessary flexibility in the movement of bulk power.

Distribution System. The distribution system is supplied by 107 substations strategically located on the high voltage 138 kV transmission system stepping down to distribution system voltages of 34.5 kV and 13.2 kV. The City's central business district is served by nine underground networks, each consisting of four primary feeders operated at 13.2 kV, transformers equipped with network protectors, and both a 4-wire 120 / 208 volt secondary grid system and a 4-wire 277 / 480 volt secondary spot system. This system is designed for the highest level of distribution reliability.

Approximately 8,096 circuit miles (three-phase equivalent) of overhead distribution lines are included in the distribution system. These overhead lines also carry secondary circuits and street lighting circuits. The underground distribution system consists of 692 miles of three-phase equivalent distribution lines, 86 miles of three-phase downtown network distribution lines, and 5,184 miles of single-phase underground residential distribution lines.

Gas System

Transmission System. The gas transmission system consists of a network of approximately 89 miles of steel mains that range in size from 8 to 30 inches. Over 62 miles of the gas transmission system were placed into service since 2000 and approximately 73% is less than 25 years old. The entire system is coated and cathodically protected to mitigate corrosion. The gas transmission system operates at pressures between 135 pounds per square inch ("psig") and 1,100 psig, and supplies gas to the distribution system and CPS Generating Plants. A Supervisory Control and Data Acquisition ("SCADA") computer system monitors the gas pressure and flow rates at many strategic locations within the transmission system. Additionally, most of the critical pressure regulating stations and isolation valves are remotely controlled by SCADA.

CPS has completed the required baseline assessments of the gas transmission system, in accordance with State and federal transmission integrity rules, using the most recently available technology. Furthermore, CPS maintains an ongoing reassessment plan and maintains a more conservative leak survey and patrol schedule interval than is required by regulation.

Distribution System. The gas distribution system consists of 297 pressure regulating stations and a network of approximately 5,577 miles of mains. The system consists of 2 to 30-inch steel mains and 1-1/4 to 8-inch high-density polyethylene (plastic) mains. The distribution system operates at pressures between 9 psig and 485 psig. All steel mains are coated and cathodically protected to mitigate corrosion. Critical areas of the distribution system are also remotely monitored by SCADA and designated critical pressure regulating stations and isolation valves are also remotely controlled by SCADA.

CPS has been methodical in its assessment and renewal of distribution infrastructure utilizing a risk-based leak survey approach to identify both mains and services that are in highest need of replacement and has an annual budget for on-going system renewal.

Accounting Policies

CPS is subject to and complies with the provisions of Government Accounting Standards Board ("GASB") pronouncements and guidance made from time to time, upon assessment of applicability to and implementation by CPS. GASB pronouncements and guidance to which CPS adheres and implements are described in its audited financial statements. For a description of recent GASB pronouncements and guidance, as well as CPS' response thereto in connection with its fiscal year 2019 financial reporting, see CPS' fiscal year 2019 Basic Financial Statements and Independent Auditors' Report.

Other than the changes resulting from GASB pronouncements and guidance that are described in CPS' fiscal year 2019 Basic Financial Statements and Independent Auditors' Report, there were no additional significant accounting principles or reporting changes implemented in the fiscal year ended January 31, 2019. Other accounting and reporting changes that occurred during the prior reporting year continued into the fiscal year ending January 31, 2019. These accounting changes and the effects on the financial statements are described in greater detail in the Management Discussion and Analysis and in the Notes to CPS' fiscal year 2019 Basic Financial Statements and Independent Auditors' Report.

Recent Financial Transactions

On August 13, 2015, CPS issued $320.5 million of Revenue Refunding Bonds, New Series 2015 to refund $339.5 million of Revenue Refunding Bonds, New Series 2007.

On December 1, 2015, CPS remarketed for a three-year term $47.65 million of Variable Rate Junior Lien Revenue Refunding Bonds, Series 2012B, while at the same time defeasing $0.17 million of the original issued bonds.

On December 3, 2015, CPS issued $235.0 million of Revenue Bonds, New Series 2015 to fund capital expenditures to the EG Systems.

On December 3, 2015, CPS issued $200.0 million of Junior Lien Revenue Bonds, Series 2015C and Series 2015D ($100.0 million, respectively) to fund capital expenditures to the EG Systems.

On July 28, 2016, CPS issued $544.3 million of Revenue Refunding Bonds, New Series 2016 to refund $609.0 million of Revenue Bonds, New Series 2008 and Revenue Refunding Bonds, New Series 2009A.

On December 1, 2016, CPS remarketed for a two-year term $47.50 million of Variable Rate Junior Lien Revenue Refunding Bonds, Series 2012C, while at the same time defeasing $0.16 million of the original issued bonds.

On December 13, 2016, CPS remarketed for a three-year term $124.56 million of Variable Rate Junior Lien Revenue Refunding Bonds, Series 2015A, while at the same time defeasing $0.44 million of the original issued bonds.

On April 27, 2017, CPS issued $308.01 million of Revenue and Refunding Bonds, New Series 2017 which included refunding Revenue Refunding Bonds, New Series 2006B and Revenue Refunding Bonds, New Series 2007.

On August 30, 2017, CPS issued $194.98 million of Revenue Refunding Bonds, New Series 2017 to refund certain outstanding commercial paper notes.

On September 14, 2017, CPS remarketed for a four-year term $123.3 million of Variable Rate Junior Lien Revenue Refunding Bonds, Series 2015B, while at the same time defeasing $1.73 million of the original issued bonds.

On November 15, 2018, CPS issued $218.29 million of Revenue Refunding Bonds, New Series 2018 which included refunding a portion of the Revenue Refunding Bonds, New Series 2009D and all of the Variable Rate Junior Lien Revenue Refunding Bonds, Series 2012A, Series 2012B, and Series 2012C.

On December 20, 2018, CPS issued $130.2 million of New Series 2018A Senior Lien Revenue Refunding Bonds. Proceeds, including the $20.9 million premium associated with the bonds, were used to refund $60.0 million and $90.0 million of the Commercial Paper Series A and Commercial Paper Series C, respectively.

On December 20, 2018, CPS issued $134.9 million of Series 2018 Variable-Rate Junior Lien Revenue Refunding Bonds. Proceeds, including the $1.2 million premium associated with the bonds, were used to refund $135.0 million of the Commercial Paper Series C.

On January 24, 2019, $52.5 million of New Series 2015 Senior Lien Revenue Refunding Bonds and $25.1 million of New Series 2016 Senior Lien Revenue Refunding Bonds were legally defeased with cash.

On September 25, 2019, CPS issued $114.7 million of Revenue Refunding Bonds, New Series 2019 to refund a portion of the Revenue Bonds, Taxable New Series 2012.

On November 21, 2019, CPS issued $252.6 million of Revenue Refunding Bonds, Series 2019 which included refunding a portion of the Revenue Refunding Bonds, New Series 2010A (Build America Bonds) and all of the Junior Lien Revenue Refunding Bonds, Series 2010B (Build America Bonds).

On December 2, 2019, CPS remarketed for a five-year term $124.2 million of Variable Rate Junior Lien Revenue Refunding Bonds, Series 2015 A, while at the same time defeasing $0.04 million of the original issued bonds.

On December 2, 2019, CPS remarketed for a five-year term $99.7 million of Variable Rate Junior Lien Revenue Refunding Bonds, Series 2015 C, while at the same time defeasing $0.03 million of the original issued bonds.

On December 5, 2019, $21.5 million of Commercial Paper Series B was legally defeased with cash. On January 9, 2020, $108.5 million of Commercial Paper Series B was legally defeased with cash.

On January 28, 2020, CPS issued $134.6 million of New Series 2020 Senior Lien Revenue Refunding Bonds to refund

$170.0 million of the Commercial Paper Series A, on January 29, 2020.

On January 28, 2020, CPS issued $127.8 million of Series 2020 Variable-Rate Junior Lien Revenue Refunding Bonds. Proceeds, including the $3.1 million premium associated with the bonds, were used to refund $50.0 million and $80.0 million of the Commercial Paper Series A and Commercial Paper Series C, respectively, on January 29, 2020.

On January 28, 2020, $108.0 million of New Series 2016 Senior Lien Revenue Refunding Bonds was legally defeased with cash.

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CPS Historical Net Revenues and Coverage [(1)]

	Fiscal Years Ended January 31, (Dollars in thousands) [(1)]				
	2015	2016	2017	2018	2019
Gross Revenues [(2)]	$ 2,666,411	$ 2,514,685	$ 2,494,120	$ 2,624,411	$ 2,808,260
Maintenance & Operating Expenses	1,608,949	1,484,744	1,489,688	1,587,906	1,608,352
Available for Debt Service	$ 1,057,462	$ 1,029,941	$ 1,004,432	$ 1,036,505	$ 1,199,908
Actual Principal and Interest Requirements:					
Senior Lien Obligations [(3),(4),(9)]	$ 335,440	$ 280,520	$ 290,264	$ 270,080	$ 259,726
Junior Lien Obligations [(5)]	$ 52,026	$ 94,722	$ 98,996	$ 120,996	$ 148,179
ACTUAL COVERAGE - Senior Lien [(6)]	3.15x	3.67x	3.46x	3.84x	4.62x
ACTUAL COVERAGE - Senior and Junior Liens	2.73x	2.74x	2.58x	2.65x	2.94x
PRO FORMA MADS COVERAGE					
Senior Lien [(7)]	2.93x	2.85x	2.78x	2.87x	3.33x
Senior and Junior Liens [(8)]	2.40x	2.34x	2.28x	2.35x	2.72x

(1) Some numbers may have been adjusted due to rounding.
(2) Calculated in accordance with the Bond Ordinances.
(3) Net of accrued interest where applicable.
(4) Includes a reduction of $14.5 million, $14.5 million, $14.5 million, $14.6 million and $14.6 million for fiscal years 2015, 2016, 2017, 2018 and 2019, respectively, related to the direct subsidy for the Build America Bonds.
(5) Includes a reduction of $9.8 million for fiscal years 2015 - 2019, related to the direct subsidy for the Build America Bonds.
(6) Calculation differs by the inclusion of nonoperating expenses in the above schedule.
(7) Maximum annual debt service on CPS Senior Lien Obligations.
(8) Maximum annual debt service on CPS Senior Lien Obligations and Junior Lien Obligations.
(9) Amount shown is gross debt service and does not include any cash contributions made.

San Antonio Water System

The City's Water System is described in detail in the body of this Official Statement.

The Airport System

General

The San Antonio International Airport (the "Airport" or "SAT"), located on a 2,600-acre site that is adjacent to Loop 410 freeway and U.S. Highway 281, is eight miles north of the City's downtown business district. The Airport consists of three runways with the main runway measuring 8,502 feet and able to accommodate the largest commercial passenger aircraft. Its two terminal buildings contain 24 second-level gates. At the beginning of the 2020 calendar year, San Antonio International Airport offered an average of 140 daily departures to 41 nonstop destinations. This service is provided by 11 airlines (eight domestic and three international carriers) including two new carriers, Frontier and Sun Country. In addition, the Airport has added 18 new flights over the past several years, six of which are to new nonstop destinations, and 12 added flights to existing markets. The growth of new and existing carriers increased total available seats by over 3,000 daily seats and lowered fares to levels comparable to competing airports.

The Airport is classified as a medium hub facility by the FAA. A "medium hub facility" is defined as a facility that enplanes between 0.25% and 0.50% of all passengers enplaned on certificated route air carriers in all services in the 50 states, the District of Columbia, and other designated territorial possessions of the United States.

According to Airports Council International North America ("ACI-NA"), an airport industry group, the Airport ranked 48th based on total U.S. passenger traffic for calendar year 2017. For the calendar year ended December 31, 2019, the Airport enplaned approximately 5,192,990 million passengers. Airport management has determined that approximately 98% of the Airport's passenger traffic is origination and destination in nature, which is important because it demonstrates strong travel to and from the City independent from any one airline's hubbing strategies. A variety of services are available to the traveling public from approximately 280 commercial businesses which lease facilities at the Airport and Stinson Municipal Airport ("Stinson").

In 2018, the San Antonio Airport System initiated a two-phased Strategic Development Plan as part of its update to the Master Plan of the San Antonio International Airport. The focus of the first phase was to determine if the current location of the San Antonio International Airport could grow to accommodate the region's long-term aviation needs in the next 20 to 50 years. This phase concluded that the current location could be adapted to meet the region's needs which were approved by City Council on October 31, 2018. Phase 2 will identify and develop the plan the Airport System will follow for the next 20-year period by evaluating a range of potential policy and development alternatives, and by producing a preferred airport development plan for the airfield, terminal, and airport access. Phase 2 will also consider airspace and land use flexibility for the next 50 years.

Stinson, located on 300 acres approximately 5.2 miles southeast of the City's downtown business district, was established in 1915, and is one of the country's first municipally-owned airports. It is the second oldest continuously operating airport in the U.S. and is the FAA's designated general aviation reliever airport to the Airport. On November 15, 2012, City Council authorized its more recent update to the Stinson Master Plan. This program informed the Department of Aviation (the "Department") of projects to be undertaken on the airfield, terminal and support in the next 20 years to meet the demand of operations growth of 3.2% Annual Compound Growth Rate ("ACGR") between 2011 and 2031. In December 2018, Stinson completed the construction of a new air traffic control tower on the south side of the airport campus. The new tower eliminates a potential line of sight issue that would have hindered tenant development. In 2019, the City Council authorized a new project that will design and construct a new parallel taxiway to Runway 14/32 which will enhance future development of adjacent land and promote airfield safety by reducing runway crossing once land is developed.

Capital Improvement Plan

The approved six-year (FY 2020 – FY 2025) Capital Improvement Plan (the "CIP") totals approximately $181.83 million and is comprised of certain projects for the design and construction of airfield improvements, road improvements, terminal expansions, IT upgrade projects and updates to the Master Plan for the San Antonio International Airport.

The CIP consists of the following:

<u>*Terminal Facilities*</u>

- Terminal A Renovations and Refurbishments, Phase II: This project is for design and construction of the expansion of the customs facility in Terminal A which will be constructed in phases along with addressing building infrastructure not captured in the first phase.

- Terminal A Renovations Phase III: This project addresses various infrastructure needs in Terminal A, which includes installing Curbside Canopies, a backup Sewer Lift Station, improvements to roof and vaulted ceiling, an HVAC Unit replacement and rental car space repurposing.

- Terminal B Expansion: This project includes design and construction for the expansion and other requirements in Terminal "B" including a new airline gate, an additional passenger screening lane at the Transportation Security Administration ("TSA") security screening checkpoint, additional concessions, airline lounge space at the central marketplace and additional office space at the ramp level.

- TA-Phase III-Front Door Modernization: This project installs new vestibule canopies at Terminal A Departures, provides shelter at the commercial sidewalk and drive, improves accessibility at Terminal A

& B Departure curbs, improves accessibility at Terminal A & B Arrivals curbs, and improves accessibility at Terminal A & B Commercial curbs.

- Terminal A Gate Expansion: The project includes the design and construction for the expansion and other requirements in Terminal "A". It modifies a hold room, adjusts adjacent aircraft parking positions and provides for the procurement and installation of additional passenger boarding bridges.

Airfield Improvements

- Taxiway H Reconstruction: This project provides for the design and construction of a portion of aircraft apron taxi-lane, installation of "No Taxi" islands and shoulders, installation of new connecting Taxiways and for the installation of guidance signage to allow the taxi-lane to be designated as Taxiway "H".

- Runway 13R Decouple, Reconstruction and Rehabilitation: The project consists of the decoupling of Runway 13R from Runway 4/22, reconstruction of two separate sections of concrete runway pavement on Runway 13R, the rehabilitation of portions of adjacent taxiways, runway lighting improvements, the reconstruction of Runway 13R, in phases, beyond the current six-year capital program and includes an environmental assessment and Memorandum of Agreement ("MOA") with the FAA.

- Taxiway E Reconstruction: This project will reconstruct Taxiway E to a new location, including associated grading, lighting, signage and markings.

- Airfield Package 6-7: Pkg 6 - Taxiway R Rehab Phases 2 & 3. Constructs a new taxiway bypass to connect to TW RC to TW R. Install new FAA communications duct bank in order to remove the in-ground bridge. Pkg 7 - Removes a bridge and Municipal Solid Waste ("MSW") and constructs a new Taxiway R on grade.

- Electrification of Ground Support Equipment for Emission Reduction: Installs (60) Ground Support Equipment ("GSE") vehicle charging stations to reduce diesel GSE off of the Airport Terminal A and B apron areas to reduce ozone emissions.

Other Projects

- Master Plan Update, SAT: This project updates the Master Plan for the San Antonio International Airport. This update will be used as a planning and programming tool for future capital development up to the next 50 years. The project includes corresponding updates to the Part 150 NCP & Drainage Master Plan and includes an EALP (Electronic Airport Landing Plan).

- Multi-User Flight Information Display System ("MUFIDS") Modernization: This project replaces the aged MUFIDS monitors in Terminal B and adds monitors in new locations throughout the campus.

- Airport Integrated Control Center ("AICC"): This project provides for the planning, design and construction of a new AICC for the Airport.

- Airside Security Program: This project is focused on improving airside security around the airside apron area with increased video surveillance and a limited Perimeter Intrusion Detection System rollout. This project will also provide airport vehicle gate access control improvements and will include limited airside operational wireless access.

- Rehabilitate West Cargo Facilities: The project installs a new roof of the building, new exterior metal siding of building including soffits and fascia, security camera and cabling upgrades, new overhead and pedestrian doors, plumbing improvements, electrical installation, ADA access ramps, and new interior walls between tenant areas.

- Parking, CCTV for Economy and Cell Lots: This project installs CCTV and emergency call boxes for the parking areas to provide safety and security. This project scope is to install 27 cameras and 16 blue emergency phones and the required supporting infrastructure in the Red, Orange and Green surface parking lots at SAT.

- Other Capital Projects: Miscellaneous projects at the Airport and at Stinson.

The anticipated sources of funding for the CIP are as follows:

Funding Sources	Projected Funding ($)
Federal Grants	
Entitlement Grants	8,725,384
Discretionary Grants	46,126,495
Noise Discretionary Grant	895,437
TxDOT Grant	3,101,000
FAA VALE Grant	1,875,000
Other Funding	
Airport Improvement & Contingency Fund	55,265,940
Stinson Revolving Fund	2,359,518
Interim Airport Financing	63,474,444
Total	**181,823,218**

The CIP includes capital improvements, which are generally described as follows:

Improvement	Amount ($)
Airport	
Airfield	78,239,540
Common Use and IT Upgrade	7,036,197
Transit/Roadways	2,235,403
Parking	4,549,387
Terminal	38,165,860
Residential Acoustic Treatment Program	1,075,000
Other Projects	40,603,729
Stinson	9,918,102
Total	**181,823,218**

PFC Projects. Public agencies wishing to impose Passenger Facility Charge ("PFC") are required to apply to the FAA for such authority and must meet certain requirements specified in the 49 USC § 40117, and the implementing regulations issued by the FAA.

The FAA issued a "Record of Decision" on August 29, 2001 approving the City's initial PFC application. The City, as the owner and operator of the Airport, received authority to impose a $3.00 PFC and to collect, in the aggregate, approximately $102,500,000 in PFC Revenues. On February 15, 2005, the FAA approved an application amendment increasing the PFC funding by a net amount of $13,893,537. On February 22, 2005, the FAA approved the City's application for an additional $50,682,244 in PFC collections to be used for 11 new projects. On June 26, 2007, the FAA approved two amendments to approved applications increasing the PFC funding by a net amount of $121,611,491 for two projects and $67,621,461 for four projects. Additionally, the FAA approved the increased collection rate from $3.00 to $4.50, effective October 1, 2007. In May 2010, the FAA approved amendments to the City's PFC collection authorization to increase the scope of the PFC funding for certain PFC projects and permitted the addition of several elements. The May 28, 2010 FAA approvals increased the PFC funding amount from $380,958,549 to $574,569,629. On March 18, 2015, the City submitted an amendment to reduce the PFC Collection authority from the amount of approximately $573.8 million to approximately $463.7 million (a reduction of approximately $110.1 million). This reduction was due to (i) estimated finance and interest costs that were overstated in the submittals compared to actual finance and interest costs and (ii) lower project costs in some cases. The FAA issued the Final Agency Decision on April 13, 2015, approving the proposed PFC amendment.

On October 1, 2007, the City began collecting a $4.50 PFC (less a $0.11 air carrier collection charge) per qualifying enplaned passenger. The City has received PFC "impose and use" authority, meaning that it may impose the PFC and use the resultant PFC Revenues for all projects, contemplated to be completed using proceeds of the Parity PFC Bonds. As of January 31, 2020, the City has collected $251,675,829 (unaudited) in PFC Revenues since authority to impose and collect the PFC was received. The estimated PFC collection expiration date is June 1, 2028.

To date, the following projects have been approved as "impose and use" projects:

- Replace Remain Overnight Apron
- Implement Terminal Modifications
- Reconstruct Perimeter Road
- Construct New Terminal B
- Acoustical Treatment Program
- Construct Elevated Terminal Roadway
- Upgrade Central Utility Plant
- Construct Apron – Terminal Expansion
- Install Utilities – Terminal Expansion
- Replace Two Aircraft Rescue and Fire Fighting Vehicles
- Conduct Environmental Impact Statement
- Reconstruct Terminal Area Roadway
- Install Noise Monitoring Equipment
- Install Terminal and Airfield Security Improvements
- Install Airfield Electrical Improvements
- PFC Development and Administration Costs

CFC Projects. The City Council, by ordinance adopted on March 8, 2012, authorized the Airport to impose the collection of a $4.50 per transaction day Customer Facility Charge ("CFC") for rental car customers to pay for all costs and expenses associated with the planning, financing, and construction and certain other costs for a Consolidated Rental Car Facility (the "ConRAC") to open in three to five years. The rental car companies began collecting the CFC on all car rentals at the Airport on April 1, 2012. The CFC was reapproved at a collection rate of $5.00 per transaction day, effective July 1, 2015, pursuant to the ordinance adopted by the City Council on June 18, 2015. The CFC rate was further increased to $5.50 per transaction day, effective October 1, 2018. The ConRAC project cost is estimated at $167.8 million. As of January 31, 2020, the City has received $84,436,637 (unaudited) in CFC Revenues since the April 1, 2012 inception of the CFC.

ConRAC Opening. ConRAC opened for business on January 17, 2018. This 1.8 million square feet state of the art facility houses up to 14 rental car companies, a quick turnaround area for fueling, vacuuming, washing and light maintenance and approximately 2,600 ready/return parking spaces. ConRAC is just a few steps away from the terminals, eliminating the need for shuttles to take passengers to their rental car locations, thus enabling the Airport to initiate significant improvements to traffic flow in the arrivals area.

Airport Operations

Direct supervision of airport operations is managed by the Department. The Department is responsible for: (1) managing, operating, and developing the Airport System and any other airfields which the City may control in the future; (2) negotiating leases, agreements, and contracts; (3) computing and supervising the collection of revenues generated by the Airport System under its management; and (4) coordinating aviation activities under the FAA.

The Department is an enterprise fund of the City. The operations and improvements at the Airport and Stinson are paid for by airport user charges, bond funds, and funds received from the FAA. No general tax fund revenues are used to operate or maintain the Airport System. The City Council appoints a 19-member Airport Advisory Commission (the "AAC" or the "Commission"). The Commission's primary purpose is to advise the Department regarding policies, including any noise-related issues affecting the Airport System and air transportation initiatives.

On February 10, 2020, San Antonio Airport System welcomed Jesus Saenz, Jr. as the new Director of Airports with overall responsibility for the management, administration and planning of the Airport System. Mr. Saenz is a 24-year veteran of airport management. He arrived in San Antonio from Houston, Texas where he was the Chief Operating Officer for the Houston Airport System. Mr. Saenz has an experienced staff to aid him in carrying out the responsibilities of his position. The principal members of the Department's staff include the Director, the Deputy Aviation Director, the Assistant Aviation Director of Operations, Assistant Aviation Director of Administration, and the Assistant Aviation Director of Asset and Planning.

The Airport System has police and fire departments on premises. The police and firefighters are assigned to duty at the Airport System from the City's police and fire departments, but their salaries are paid by the Department as an operation and maintenance expense of the Airport System.

The FAA has regulatory authority over navigational aid equipment, air traffic control, and operating standards for the Airport System.

The passage of the Aviation and Transportation Security Act in November of 2001, created the TSA. The Department has worked closely with the TSA to forge a new higher level of security for the traveling public. TSA employs about 300 individuals at the Airport System to meet the federal security requirements.

As of October 1, 2019, the Airport System had approximately 499 authorized positions as follows:

Administration	109	Parking/GT	63
Police/Security	96	Airport Operations	48
Fire Rescue	33	Stinson Airport	8
Facilities Maintenance	142		

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Comparative Statement of Gross Revenues and Expenses - San Antonio Airport System

The historical financial performance of the Airport System is shown below for the last five fiscal years:

	Fiscal Year Ended September 30				
	2015 [1]	2016	2017	2018	2019
Gross Revenues [2]	$91,617,612	$96,847,128	$94,686,702	$106,952,588	$116,003,603
Expenses	(56,198,508)	(58,913,011)	(60,674,648)	(65,071,241)	(66,246,817)
Net Revenues	$35,419,104	$37,934,117	$34,012,054	$41,881,347	$49,756,786

[1] 2015 data has been restated to match CAFR amounts.
[2] As reported in the City's audited financial statements.
Source: City of San Antonio, Department of Finance.

Total Domestic and International Enplaned Passengers - San Antonio Airport

The total domestic and international enplaned passengers on a calendar year basis, along with year-to-year percentage change are shown below:

Calendar Year	Total	Increase/ (Decrease)	Percent (%) Change
2010	4,022,070	116,631	2.99
2011	4,071,781	49,711	1.24
2012	4,103,364	31,583	0.78
2013	4,119,039	15,675	0.38
2014	4,191,391	72,352	1.76
2015	4,257,688	66,297	1.58
2016	4,309,761	52,073	1.22
2017	4,521,611	211,850	4.92
2018	5,028,658	507,047	11.21
2019	5,192,990	164,332	3.27

Source: City of San Antonio, Department of Aviation.

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2015	4,257,688	66,297	1.58
2016	4,309,761	52,073	1.22
2017	4,521,611	211,850	4.92
2018	5,028,658	507,047	11.21
2019	5,192,990	164,332	3.27

Source: City of San Antonio, Department of Aviation.

Total Enplaned and Deplaned International Passengers - San Antonio Airport

The total enplaned and deplaned for international passengers on a calendar year basis, along with year-to-year percentage change are shown below:

Calendar Year	Total	Increase/ (Decrease)	Percent (%) Change
2010	136,970	(2,316)	(1.66)
2011	182,031	45,061	32.90
2012 [1]	421,718	239,687	131.67
2013	474,609	52,891	12.54
2014	464,765	(9,844)	(2.07)
2015	511,076	46,311	9.96
2016 [2]	400,061	(111,015)	(21.72)
2017	368,381	(31,680)	(7.92)
2018	415,018	46,637	12.66
2019	467,475	52,457	12.64

[1] The increase in total enplaned and deplaned international passengers from 2011 to 2012 is attributable to 3 new airlines operating in 2012. These airlines are AirTran, InterJet, and Viva AeroBus.

[2] The decline in international is in large part a result of capacity reductions by Southwest to Mexico City and Interjet to Toluca. In addition to capacity adjustments, the continuing devaluation of the Peso to the U.S. Dollar may be contributing to decreased leisure travel between the two countries. In December 2016, the Peso had 13.7% less value than the same time in 2015, and 47.0% less value than two years prior to that.

Source: City of San Antonio, Department of Aviation.

Air Carrier Landed Weight - San Antonio Airport

The historical aircraft landed weight in 1,000-pound units on a calendar year basis is shown below. Landed weight is utilized in the computation of the Airport's landed fee.

Calendar Year	Total	Increase/ (Decrease)	Percent (%) Change
2010	5,632,203	144,666	2.64
2011	5,707,294	75,091	1.33
2012	5,812,227	104,933	1.84
2013	5,784,738	(27,489)	(0.47)
2014	5,661,554	(123,184)	(2.13)
2015	5,719,952	58,398	1.03
2016	5,729,257	9,305	0.16
2017	6,024,433	295,176	5.15
2018	6,594,764	570,331	9.47
2019	6,754,689	159,925	2.42

Source: City of San Antonio, Department of Aviation.

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APPENDIX B

EXCERPTS FROM THE SAN ANTONIO WATER SYSTEM

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Year Ended December 31, 2019

The information contained in this Appendix consists of excerpts selected by the Co-Financial Advisors from the San Antonio Water System Comprehensive Annual Financial Report for the Year Ended December 31, 2019, but is not intended to be a complete statement of the System's financial condition. Reference is made to the complete report for further information.

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INDEPENDENT AUDITORS' REPORT

To the Board of Trustees
San Antonio Water System
San Antonio, Texas

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities and the aggregate remaining fund information of San Antonio Water System (SAWS), a component unit of the City of San Antonio, Texas, as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise SAWS' 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 audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to SAWS' 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 SAWS' 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 aggregate remaining fund information of SAWS, 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 Matter

As discussed in Note A, SAWS adopted the provisions of Government Accounting Standards Board Statement No. 83, *Certain Asset Retirement Obligations,* effective January 1, 2019. The accounting change has been retrospectively applied to prior period presented. Our opinions are not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the 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.

Supplementary Information

Our audits were conducted for the purpose of forming opinions on the financial statements as a whole. The supplemental information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits 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 supplemental information is fairly stated in all material respects in relation to the financial statements as a whole.

Other Information

Our audits were conducted for the purpose of forming opinions on the financial statements as a whole. The introduction, statistical section and bonded debt schedules and analyses information as identified in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information has not been subjected to the auditing procedures applied in the audits of the basic financial statements, and accordingly, we express no opinion or provide any assurance on it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have issued our report dated April 1, 2020, on our consideration of SAWS' 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 the 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 SAWS' internal control over financial reporting and compliance.

Baker Tilly Virchow Krause, LLP

Austin, Texas
April 1, 2020

Management's Discussion and Analysis

(Unaudited)

This Management's Discussion and Analysis (MD&A) serves as an introduction to the basic financial statements and provides a narrative overview and analysis of financial activities and performance as detailed in the Comprehensive Annual Financial Report (CAFR) for fiscal years ending December 31, 2019 and 2018. Please read it in conjunction with SAWS' financial statements including the notes to the financial statements and required supplemental information, which follow this section.

FINANCIAL HIGHLIGHTS

- SAWS' net position increased by $324.8 million during 2019.
- Total assets and deferred outflows of resources increased $335.2 million from 2018 to 2019, including net capital asset growth of $383.3 million.
- SAWS contributed $178.9 million to an irrevocable trust to legally defease $167.9 million in revenue bonds, reducing future debt service by approximately $213 million.
- SAWS refunded $109.5 million in long-term debt, reducing future debt service payments by nearly $28.4 million and resulting in an economic gain of $14.2 million.
- Operating revenues increased $42.1 million or 6.1% from 2018 to 2019 primarily due to increased billed usage and rate adjustments implemented during the year.
- Total debt coverage was 2.14x for 2019 compared to 1.98x for 2018.

OVERVIEW OF THE FINANCIAL STATEMENTS

MD&A is intended to serve as an introduction to the basic financial statements, which are comprised of the following components:

- *Statements of Net Position* - present information on all of SAWS' assets, deferred outflows of resources, liabilities and deferred inflows of resources as of the end of each calendar year, with the net amount reported as SAWS' net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of SAWS is improving or deteriorating.
- *Statements of Revenues, Expenses and Changes in Net Position* - present information showing how SAWS' net position changed during the years presented on an accrual basis. This statement measures the success of SAWS' activities and can be used to determine whether SAWS has successfully recovered all its costs through its rates and other charges.
- *Statements of Cash Flows* – reflect cash receipts and payments for operating, non-capital financing, capital and related financing, and investing activities for the years presented.
- *San Antonio Water System Fiduciary Funds Statements of Fiduciary Net Position* – present information on SAWS single-employer postretirement benefit plans' assets and liabilities, with the difference between the two reported as net position held in trust for pension and other postemployment benefits.
- *San Antonio Water System Fiduciary Funds Statements of Changes in Fiduciary Net Position* – present information showing how the fiduciary funds' net position changed during the years presented on an accrual basis.

- *Notes to financial statements* - provide additional information that is essential to a full understanding of the data provided in the financial statements, such as SAWS' accounting policies, significant account balances and activities, material risks, obligations, commitments, contingencies and subsequent events, if any.
- *Required Supplemental Information* – Historical information is presented concerning SAWS' defined benefit plans including changes in the net pension and other postemployment benefit liabilities, annual contributions made to benefit plans, and annual investment returns.

Supplemental information is presented to provide supporting schedules, which are not a required part of the basic financial statements.

- *Supplemental Schedules* – Includes schedules that provide information relative to the sources and uses of funds in accordance with SAWS' founding ordinance and budgetary information and combining schedules for the fiduciary funds.

Other information is presented for additional analysis and is also not a required part of the basic financial statements.

- *Statistical Section* – Presents detailed information as a context for understanding what the information in the financial statements, note disclosures and required supplementary information says about SAWS' overall financial health.
- *Bonded Debt Schedules and Analyses* – Includes detailed schedules that provide information relative to SAWS' various bond obligations.

FINANCIAL ANALYSIS – FINANCIAL POSITION

CONDENSED NET POSITION INFORMATION				**2019-2018**		**2018-2017**	
		As of December 31,		**Increase**	**%**	**Increase**	**%**
(amounts in thousands)	**2019**	**2018***	**2017**	**(Decrease)**	**Change**	**(Decrease)**	**Change**
Current assets	$ 765,599	$ 757,380	$ 643,337	$ 8,219	1%	$ 114,043	18%
Capital assets, net	5,649,427	5,266,084	5,051,777	383,343	7%	214,307	4%
Other non-current assets	273,008	352,181	369,151	(79,173)	(22%)	(16,970)	(5%)
Total Assets	6,688,034	6,375,645	6,064,265	312,389	5%	311,380	5%
Deferred outflows of resources	140,132	117,301	93,340	22,831	19%	23,961	26%
Total Assets and Deferred Outflows of Resources	6,828,166	6,492,946	6,157,605	335,220	5%	335,341	5%
Current liabilities	242,620	226,216	215,280	16,404	7%	10,936	5%
Non-current liabilities	3,142,237	3,137,188	3,085,719	5,049	0%	51,469	2%
Total Liabilities	3,384,857	3,363,404	3,300,999	21,453	1%	62,405	2%
Deferred inflows of resources	12,794	23,847	2,328	(11,053)	(46%)	21,519	924%
Total Liabilities and Deferred Inflows of Resources	3,397,651	3,387,251	3,303,327	10,400	0%	83,924	3%
Net Position:							
Net investment in capital assets	2,758,354	2,355,450	2,217,283	402,904	17%	138,167	6%
Restricted	312,223	384,634	358,453	(72,411)	(19%)	26,181	7%
Unrestricted	359,938	365,611	278,542	(5,673)	(2%)	87,069	31%
Total Net Position	$ 3,430,515	$ 3,105,695	$ 2,854,278	$ 324,820	10%	$ 251,417	9%

* 2018 was restated due to the implementation of GASB Statement No. 83. See Notes L and M for more information.

Net Position

SAWS' net position increased $324.8 million from 2018 to 2019 and increased $251.4 million from 2017 to 2018. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of SAWS is improving or deteriorating. Other considerations, both financial and non-financial, should also be evaluated such as economic conditions, population growth, availability of water supplies and credit ratings. These considerations are addressed in MD&A or other sections of this CAFR.

The largest portion of SAWS' net position reflects its net investment in capital assets. SAWS' net investment in capital assets represents the carrying value of capital assets and capital related deferred outflows of resources, less capital related borrowings. The primary reasons for an increase in the net investment in capital assets are capital assets acquired with non-debt resources, including assets contributed by developers, and repayments of debt. Depreciation expense serves to decrease the net investment in capital assets. SAWS' net investment in capital assets increased by $402.9 million between 2018 and 2019 and $138.2 million from 2017 to 2018.

Funds that have been restricted for a specific purpose by legally enforceable legislation and bond covenants are classified as restricted net position. In accordance with City of San Antonio Ordinance 75686, SAWS must maintain an operating reserve equal to two months of the annual maintenance and operations budget. SAWS is also required to make monthly transfers to a Debt Service Fund sufficient to make the semi-annual debt service payments on outstanding bonds. Cash and investments restricted for construction purposes, net of any related liabilities, are also reflected in these totals.

Finally, SAWS must accumulate and maintain a debt service reserve equal to 100% of the maximum annual debt service requirements for senior lien debt obligations plus the average annual debt service on all junior lien debt obligations secured by the debt service reserve. SAWS may provide surety policies equal to all or part of the required debt service reserve. Restricted net position decreased $72.4 million from 2018 to 2019 primarily due to the use of restricted funds in connection with the debt defeasance mentioned above and the reduction in required debt service reserve fund requirements resulting from the defeasance and refunding of bonds with such requirements. Restricted net position increased $26.2 million from 2017 to 2018 primarily due to the 2018 proceeds from capital recovery fees exceeding the level of capital expenditures funded with such fees.

The remaining balance of SAWS' net position is unrestricted and may be used for any allowable purpose as outlined in Ordinance 75686. Unrestricted net position decreased $5.7 million from 2018 to 2019 primarily due to the usage of unrestricted funds to defease bonds, transfers to the Debt Service Fund and capital expenditures paid with renewal and replacement funds, which exceeded funds provided by operations.

Unrestricted net position increased $87.1 million from 2017 to 2018 as funds provided by operations exceeded transfers to the debt service fund and capital expenditures paid with renewal and replacement funds. Additionally, during 2019 SAWS adopted GASB Statement No. 83, which resulted in the recording of a change to unrestricted net position as of December 31, 2018 of $2.7 million. For further information on the implementation of GASB Statement No. 83, please refer to Note M.

FINANCIAL ANALYSIS – REVENUES, EXPENSES AND CHANGES IN NET POSITION

During 2019, SAWS recorded a change in net position of $324.8 million, which consisted of income before capital contributions of $147.5 million and capital contributions of $177.3 million. In 2018, SAWS recorded a change in net position of $269.7 million, which consisted of income before capital contributions of $123.7 million and capital contributions of $146.0 million.

CONDENSED REVENUES, EXPENSES AND CHANGES IN NET POSITION INFORMATION				2019-2018		2018-2017	
		As of December 31,		Increase	%	Increase	%
(amounts in thousands)	2019	2018*	2017	(Decrease)	Change	(Decrease)	Change
Operating revenues							
Water delivery system	$ 229,203	$ 218,399	$ 202,264	$ 10,804	5%	$ 16,135	8%
Water supply system	218,842	202,674	202,143	16,168	8%	531	0%
Wastewater system	274,519	259,124	250,977	15,395	6%	8,147	3%
Chilled water	10,615	10,849	11,368	(234)	(2%)	(519)	(5%)
Total operating revenues	733,179	691,046	666,752	42,133	6%	24,294	4%
Non-operating revenues	32,583	22,488	10,407	10,095	45%	12,081	116%
Total Revenues	765,762	713,534	677,159	52,228	7%	36,375	5%
Operating expenses							
Salaries and fringe benefits	162,445	149,970	148,058	12,475	8%	1,912	1%
Contractual services	173,187	171,032	168,350	2,155	1%	2,682	2%
Materials and supplies	26,469	23,485	23,159	2,984	13%	326	1%
Other charges	6,726	11,718	11,150	(4,992)	(43%)	568	5%
Less costs capitalized to construction in progress	(30,743)	(31,613)	(32,275)	870	(3%)	662	(2%)
Depreciation and amortization expense**	157,225	155,550	152,072	1,675	1%	3,478	2%
Total operating expenses	495,309	480,142	470,514	15,167	3%	9,628	2%
Non-operating expenses							
Interest expense	96,420	88,542	86,615	7,878	9%	1,927	2%
Debt issue costs	2,627	1,711	1,385	916	54%	326	24%
Other finance charges	2,066	1,957	2,697	109	6%	(740)	(27%)
Loss on defeased debt	664	-	-	664	0%	-	0%
Gain on sale of capital assets	(886)	(924)	(951)	38	(4%)	27	(3%)
Payments to City of San Antonio	21,917	18,287	17,276	3,630	20%	1,011	6%
Payments to other entities	99	101	108	(2)	(2%)	(7)	(6%)
Total non-operating expenses	122,907	109,674	107,130	13,233	12%	2,544	2%
Total Expenses	618,216	589,816	577,644	28,400	5%	12,172	2%
Increase in net position before capital contributions	147,546	123,718	99,515	23,828	19%	24,203	24%
Capital Contributions	177,274	145,990	141,414	31,284	21.4%	4,576	3.2%
Change in Net Position	324,820	269,708	240,929	55,112	20.4%	28,779	11.9%
Net Position, beginning of year*	3,105,695	2,835,987	2,613,349	269,708	9.5%	222,638	8.5%
Net Position, end of year	$ 3,430,515	$ 3,105,695	$ 2,854,278	$ 324,820	10.5%	$ 251,417	8.8%

** Net position as of January 1, 2018 was reduced by $18,291,000 related to the adoption of GASB Statement No. 75. Periods prior to 2018 do not reflect the requirements of this statement.*

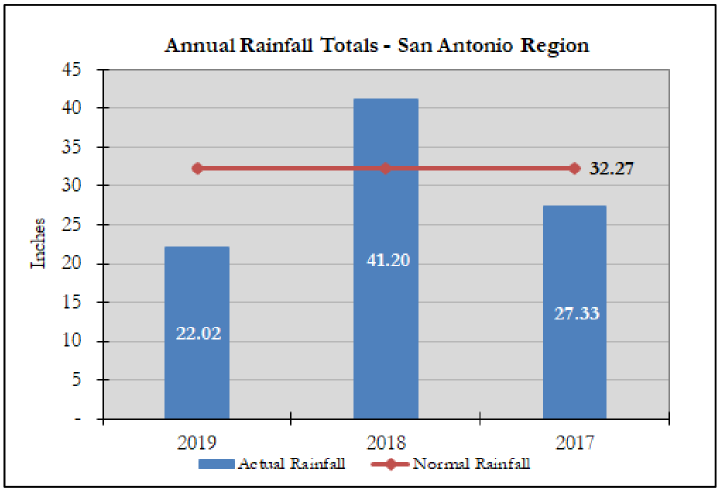
*** Depreciation and amortization expense were restated for 2018 due to the implementation of GASB Statement No. 83.*

Operating Revenues

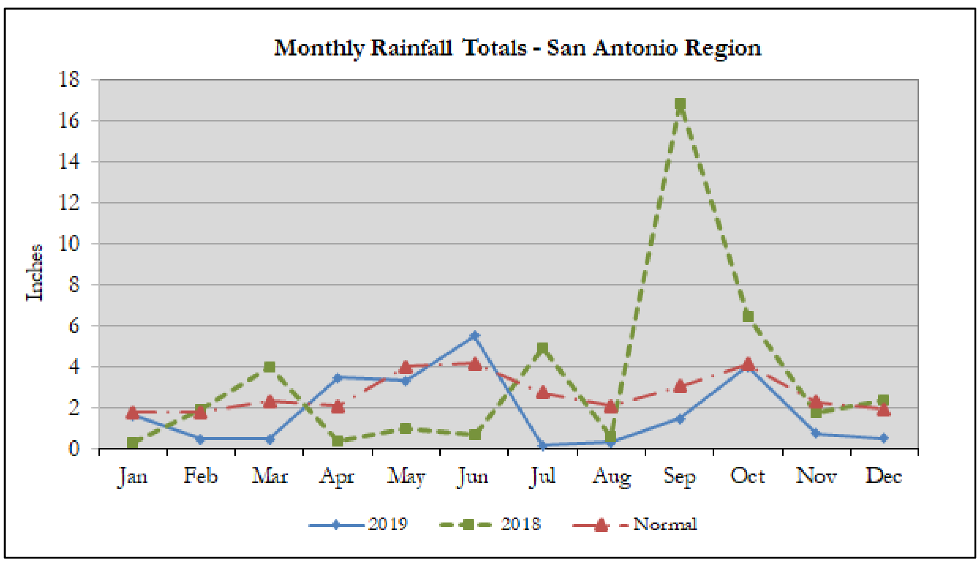
SAWS' operating revenues are provided by its four core businesses: Water Delivery, Water Supply, Wastewater, and Chilled Water. Changes in operating revenues from year to year are largely the result of weather conditions, customer growth and changes in rates for service. SAWS' operating revenues increased from $691.0 million in 2018 to $733.2 million in 2019. An average rate increase of 4.7% that took effect in January, an increase in billed water usage of 3.1%, and customer growth of 1.8% contributed to the increase in operating revenue in 2019.

SAWS' operating revenues increased from $666.8 million in 2017 to $691.0 million in 2018. An average rate increase of 5.8% that took effect in January more than offset a decrease in water usage of 2.5%. Customer growth of 1.7% also contributed to the growth in operating revenues in 2018.

The Water Delivery core business is responsible for the actual distribution of water from its source to the customer's premises. Operating revenues for this business are derived through a combination of a monthly service charge that is dependent upon the size of the customer's water meter and a volume charge that relates to the customer's metered water usage. Water Delivery operating revenues increased $10.8 million or 5.0% to $229.2 million for 2019 largely as a result of a 3.1% increase in billed usage and a 0.4% rate adjustment for this business unit, which went into effect in January. Water Delivery operating revenues increased $16.1 million or 8% from 2017 to 2018 largely as a result of a 9.7% rate increase for this business unit.



Total rainfall was 22.02 inches for 2019, approximately 32% below normal rainfall of 32.27 inches and nearly 47% less than 2018 rainfall of 41.20 inches. 2018 total rainfall was nearly 51% more than 2017 rainfall of 27.33 inches.



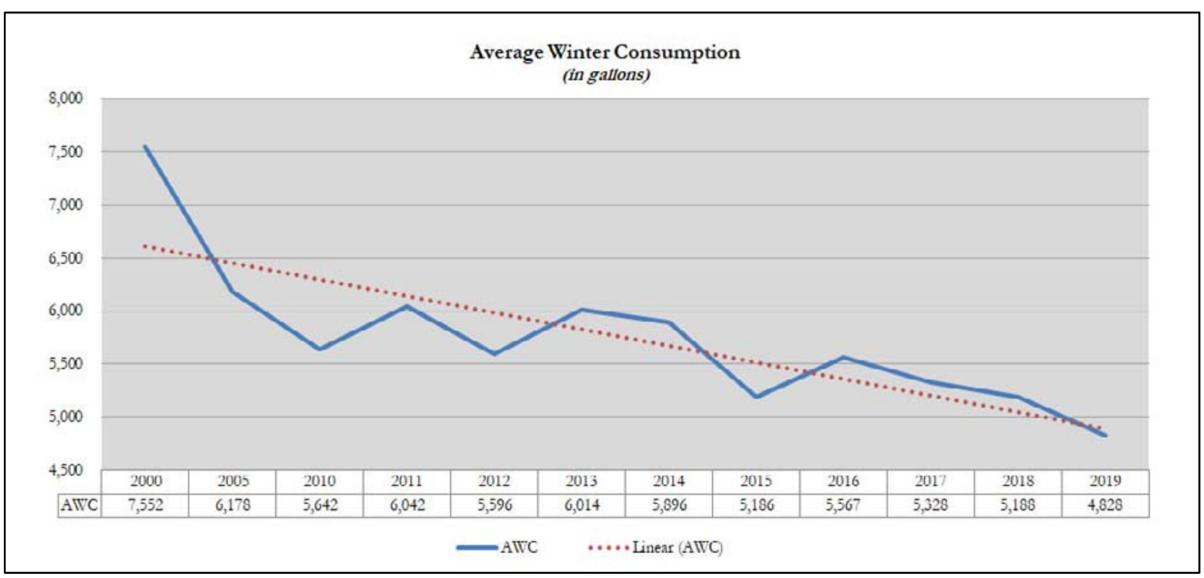
The Water Supply core business is responsible for all functions related to the development and provision of additional water resources. In order to support the costs associated with these initiatives, in 2000, SAWS implemented a separate funding mechanism, known as the Water Supply Fee, for water supply development and water quality protection. Certain other charges are also included in Water Supply operating revenues including the following:

- pass-through fees designed to recoup the annual fees paid to the Edwards Aquifer Authority (EAA) for permitted water rights
- meter fees and volumetric charges to customers utilizing recycled water for industrial or irrigation purposes
- allocated portions of water delivery revenues designed to fund residential and commercial conservation programs and debt service associated with water supply and recycle projects in progress prior to the implementation of a separate Water Supply Fee

Water Supply operating revenues increased $16.2 million or 8.0% from 2018 to $218.8 million for 2019 as a result of a 4.3% water supply rate increase combined with the increase in billed water usage. Water Supply operating revenues increased $0.5 million or 0.3% from 2017 to 2018 as a result of a 4.5% water supply rate increase that mitigated decreased water usage.

The collection and treatment of wastewater is the primary function of the Wastewater core business. More than half of Wastewater operating revenues are generated by residential customers. The residential portion of Wastewater operating revenue is calculated based upon the average metered water usage of each residential wastewater customer during a three consecutive month billing period from November 15th through March 15th. This average, referred to as the average winter consumption (AWC), goes into effect with the April billing each year and continues for a period of twelve months.

The following chart depicts SAWS AWC since 2000. While periods of extremely dry weather lead to spikes in the AWC, water conservation efforts have resulted in an overall downward trend in the AWC. Heavier rainfall at the beginning of the 2018 and 2019 winter average measurement period resulted in a decrease in the AWC of 2.5% and 6.9%, respectively.



Wastewater operating revenues increased $15.4 million or 6% to $274.5 million in 2019 primarily due to a rate increase of 8.0% and customer growth of 1.7% which mitigated the decrease in the AWC. Wastewater operating revenues increased $8.1million or 3% in 2018 primarily due to a rate increase of 3.6% and customer growth of 1.7%.

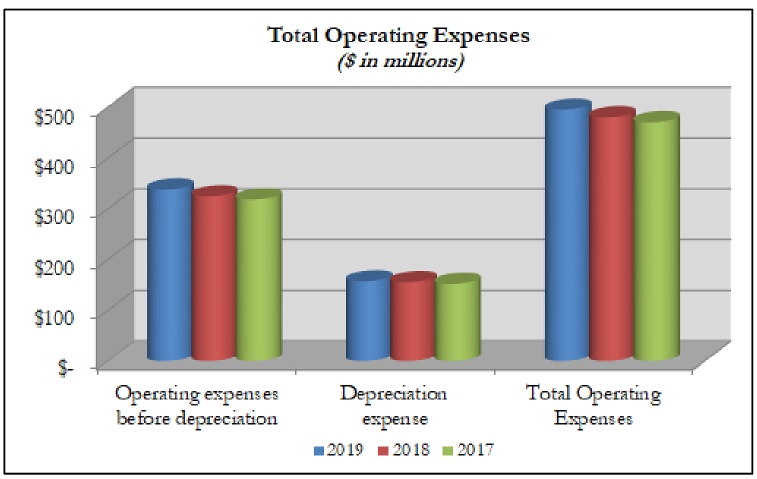
The Chilled Water core business is responsible for providing cooling services to customers, including various downtown hotels, City of San Antonio facilities, the Alamodome, Port Authority of San Antonio tenants and Hemisfair Plaza tenants. Operating revenues for this core business consist of a fixed base load demand charge for each customer and a pass-through charge to recover utility costs. Operating revenues for this core business decreased slightly to $10.6 million for 2019 from $10.8 million for 2018. Chilled Water operating revenues for 2018 were down slightly from $11.4 million in 2017.

Non-operating revenues

Non-operating revenues, which primarily represent interest income earned on investments and the federal interest subsidy on SAWS Build America Bonds (BABs), increased $10.1 million in 2019 from 2018 and $12.1 million in 2017 from 2018 due to an increase in investment income associated with both an increase in the average investment balance and an increase in the yield on investments. A $3.8 million favorable mark to market adjustment also contributed to the increase in 2019.

Operating Expenses

Total 2019 operating expenses of $495.3 million increased $15.2 million or 3% from 2018 primarily due to increased spending on purchased water in combination with increases in actuarially determined benefit costs and salary increases.



Salary and benefit related costs increased $12.5 million or 8% from 2018 to 2019 largely as a result of increased pension and OPEB related expenses and merit adjustments given to employees. Contractual services increased $2.2 million or 1.3% in 2019 as an increase in spending on purchased water payments and maintenance expense more than offset a decrease in spending on contractual professional services. Depreciation and amortization expense increased $1.7 million or 1.1% as result of capital additions during the year.

Total 2018 expenses of $479.0 million increased $9.6 million or 1.8% from 2017 primarily due to increased spending on employee health insurance, infrastructure maintenance, and conservation programs. Salary and benefit related costs increased $1.9 million or 1.3% from 2017 to 2018 largely as a result of increased spending on employee health insurance and merit adjustments given to employees, which more than offset a decrease in pension related expenses. Contractual services increased $2.7 million or 1.6% in 2018 as an increase in spending in conservation programs, maintenance expense, and contractual professional services more than offset the decrease in purchased water payments. Depreciation expense increased $3.5 million or 2.3% as result of capital additions during the year and Asset Retirement Obligation amortization expense associated with the adoption of GASB Statement No. 83 in 2019 and restated for 2018.

Non-operating Expenses

Non-operating expenses increased $12.6 million or 11.5% in 2019 primarily due to increases in interest expense, payments to the City of San Antonio, debt issue costs and a loss on defeased debt. The $7.9 million increase in interest expense is primarily due to SAWS implementing GASB Statement No. 89 which requires that interest expense associated with the construction of capital assets be recognized as an expense of the period. SAWS capitalized $6.6 million of interest charges in 2018. Payments to the City of San Antonio increased as a result of increased revenues during the year as well as an increase in the percentage of gross revenues to be remitted to the City of San Antonio, which increased from 2.7% to 4.0% in October 2019.

Non-operating expenses increased $2.5 million or 2.4% in 2018 driven by an increase in interest expense and payments to the City of San Antonio. The $1.9 million increase in interest expense reflects a rise in short-term borrowing costs, while the increase in the payments to the City of San Antonio are attributable to increased revenues.

Capital Contributions

Capital contributions for 2019 totaled $177.3 million which represents an increase of $31.3 million from 2018. In 2018, capital contributions totaled $146.0 million, an increase of $4.6 million from 2017.

CAPITAL CONTRIBUTIONS				2019-2018		2018-2017	
	As of December 31,			Increase	%	Increase	%
($ in thousands)	2019	2018	2017	(Decrease)	Change	(Decrease)	Change
Plant Contributions	$ 73,375	$ 59,761	$ 60,643	$ 13,614	23%	$ (882)	(1%)
Capital Recovery Fees	94,641	79,794	72,846	14,847	19%	6,948	10%
Contributions in Aid of Construction	9,258	6,435	7,925	2,823	44%	(1,490)	(19%)
Total Capital Contributions	$ 177,274	$ 145,990	$ 141,414	$ 31,284	21%	$ 4,576	3%

CAPITAL ASSET ACTIVITY

During 2019 SAWS' total capital assets (net of accumulated depreciation) grew from $5.3 billion to $5.6 billion, while during 2018, net capital assets increased from $5.1 billion to $5.3 billion. This investment in capital assets includes infrastrucuture (including water and wastewater mains and other infrastrucuture), buildings and improvements, land and construction in progress, machinery and equipment, water rights and intangibles. Capital asset additions were $542.6 million in 2019 and $373.9 million in 2018. The following graph shows capital assets by asset category for each year.

CAPITAL ASSETS				2019-2018		2018-2017	
	As of December 31,			Increase	%	Increase	%
($ in thousands)	2019	2018	2017	(Decrease)	Change	(Decrease)	Change
Infrastructure	$ 5,280,838	$ 5,015,604	$ 4,881,563	$ 265,234	(3%)	$ 134,041	3%
Buildings and improvements	863,182	832,202	996,829	30,980	4%	(164,627)	(17%)
Land and construction in progress	788,640	619,933	439,630	168,707	27%	180,303	41%
Machinery and equipment	618,542	578,455	565,049	40,087	7%	13,406	2%
Water rights	248,881	248,881	248,677	-	0%	204	0%
Intangibles	54,167	53,970	48,911	197	0%	5,059	10%
Less Accumulated Depreciation	(2,204,823)	(2,082,961)	(2,128,882)	(121,862)	6%	45,921	(2%)
Total Capital Assets	$ 5,649,427	$ 5,266,084	$ 5,051,777	$ 383,343	7%	$ 214,307	4%

Major capital asset spending for the year ended December 31, 2019 included the following projects:

- Central Water Integration Pipeline – This project includes the pipelines, tanks, pump stations and other related infrastructure necessary for receipt and conveyance of the Vista Ridge water (scheduled to go online in April 2020) throughout the SAWS water transmission and distribution system. Spending during the year totaled $120.1 million. This project was still in progress at year end.

- Multiple Sewershed Package 2A – This project includes the replacement of 2.8 miles of sewer pipelines and related infrastructure and is part of the EPA Consent Decree. Spending during the year totaled $17.8 million. This project was still in progress at year end.

- E-19 Seguin Road to Nacogdoches Road Segment 2 – This project includes the replacement of three miles of sewer pipeline and related infrastructure and is part of the EPA Consent Decree. Spending during the year totaled $17.1 million. This project was still in progress at year end.

Construction in progress (CIP) was $673.6 million at December 31, 2019 and $506.8 million at December 31, 2018. The increase in CIP was primarily due to increased capital spending for wastewater projects required to comply with the EPA Consent Decree and for the infrastructure needed to accept the increased water supply from the Vista Ridge Pipeline Project. Overall, SAWS is committed under various contracts for completion of construction or acquisition of capital assets totaling $403.3 million as of December 31, 2019. For further information on capital assets, refer to Note E.

LONG-TERM DEBT ACTIVITY

In 2019, SAWS issued $279.8 million in junior lien bonds in three transactions. The proceeds of the bonds, including premiums, were used to refund $109.5 million in revenue bonds, provide funds for capital improvements, and pay the cost of issuance. Additionally, SAWS issued $70 million in commercial paper notes to provide funds for capital improvement projects. SAWS also contributed $178.9 million to an irrevocable trust for the legal defeasance of $167.9 million in revenue bonds, reducing future debt service by approximately $213 million.

In 2018, SAWS issued $219.3 million in junior lien bonds in two transactions. The proceeds of the bonds, including premiums, were used to refund $40.8 million in revenue bonds, refund $125.7 million in commercial paper notes, provide funds for capital improvement projects, and pay the cost of issuance. Additionally, SAWS issued $67 million in commercial paper notes to provide funds for capital improvement projects.

SAWS intends to reissue maturing commercial paper and ultimately refund such maturities with proceeds from the issuance of long-term revenue bonds. Consistent with this intent, SAWS classifies outstanding commercial paper notes as long-term debt.

In September 2019, the three major credit rating agencies, Standard & Poor's Rating Service, Moody's Investors Services, and Fitch Ratings, affirmed SAWS' credit ratings. SAWS' high quality credit ratings are based on its large and diverse service area, sound financial management, long-term planning of water supply and infrastructure needs, and competitive water and sewer rates. SAWS' commercial paper ratings were last updated in September 2019 based on a new revolving credit agreement with JPMorgan Chase Bank, N.A., and affirmed the existing revolving credit agreement with Wells Fargo Bank, N.A. For additional information on the commercial paper program, refer to Note H.

BOND AND COMMERCIAL PAPER RATINGS				
	Senior Lien Debt	Junior Lien Debt	Tax-Exempt Commercial Paper Series A-1	Tax-Exempt Commercial Paper Series B
Fitch Ratings	AA+	AA	F1+	F1+
Moody's Investors Service, Inc.	Aa1	Aa2	P-1	P-1
Standard & Poor's Ratings Service	AA+	AA	A-1+	A-1+

SAWS' bond ordinance requires the maintenance of a debt coverage ratio of at least 1.25x the current annual debt service on outstanding senior lien debt. As of December 31, 2019 and 2018, SAWS was in compliance with the terms and provisions of the ordinances and documents related to its outstanding bonds and commercial paper. In 2018, SAWS began excluding non-cash revenues and expenses from the pledged revenue calculation, including mark to market investment adjustments, pension & OPEB related expenses and the write-off of impaired CIP projects.

FINANCIAL RATIOS	2019	2018	2017
Current Year Debt Coverage‡:			
Senior Lien Debt	8.66x	6.57x	6.06x
All Debt	2.14x	1.98x	1.89x
Maximum Annual Debt Coverage‡:			
Senior Lien Debt	8.66x	4.58x	4.30x
All Debt	2.10x	1.92x	1.89x
Net Position Ratio			
(net position/total liabilities + net position)	50.2%	47.8%	46.4%
‡ Debt service is net of federal interest subsidy.			

ECONOMIC OUTLOOK FOR THE FUTURE

In order to facilitate the financial close of the Vista Ridge Pipeline Project, in late 2015, the Board of Trustees and the City Council pre-approved a series of four annual water supply fee rate adjustments beginning in 2017 and ending in 2020. Consistent with the terms of these pre-approved increases, the 2020 Annual Operating Budget reflected an increase of 52.4% in the water supply fee rate. This increase combined with there being no changes in either the water delivery or wastewater rates for 2020 resulted in a 9.9% rate adjustment for the average residential customer (assuming 7,092 gallons of water usage and 5,668 gallons of sewer usage per month).

As a result of the water supply fee rate change, a 19.2% rate adjustment was also implemented for recycled water service, which was consistent with SAWS policy to change recycled water rates based on the average impact of water delivery and water supply rate adjustments on the average residential customer for potable water service. These adjustments were implemented as of January 1, 2020.

The Vista Ridge Pipeline Project is nearing completion of the construction phase. The anticipated capital cost of SAWS improvements is currently projected to be approximately $220 million. The construction phase has an estimated completion date of April 15, 2020, at which time SAWS will be obligated to pay for water (up to 50,000 acre-feet annually) made available. The 2020 budget includes $80.7 million in operations and maintenance costs associated with the Vista Ridge Pipeline Project.

Average customer connections grew 1.8% in 2019 and 1.7% in 2018. The San Antonio region is positioned to see continued growth during the foreseeable future. While customer growth can help offset increasing operating costs, continuing costs to address infrastructure issues, including SAWS' EPA Consent Decree, will likely require future rate adjustments.

CONTACTING SAWS' FINANCIAL MANAGEMENT

This Comprehensive Annual Financial Report is provided to our citizens, customers, investors and creditors as a general overview of SAWS' financial condition and results of operation with a general explanation of the factors affecting the finances of the organization. It is provided to demonstrate SAWS' accountability for the revenues it collects and the expenditures it makes for the services provided. If you have questions about this report or need additional financial information, contact either of the following:

Cecilia Velasquez
Director of Accounting/Controller
Email: Cecilia.Velasquez@saws.org

Douglas P. Evanson
Sr.Vice President/Chief Financial Officer
Email: Doug.Evanson@saws.org

Mailing address:
San Antonio Water System
PO Box 2449
San Antonio, TX 78298

Information about the San Antonio Water System can also be obtained through the Internet at www.saws.org.

BASIC FINANCIAL STATEMENTS

San Antonio Water System
STATEMENTS OF NET POSITION
(amounts in thousands)

	December 31, 2019	December 31, 2018 Restated
CURRENT ASSETS		
Unrestricted Current Assets		
Cash and cash equivalents	$ 107,746	$ 58,064
Investments	366,112	436,823
Accounts receivable, net of allowances for uncollectible accounts	74,150	69,490
Other current assets	15,167	14,280
Total unrestricted current assets	563,175	578,657
Restricted Current Assets:		
Cash and cash equivalents	77,630	16,473
Investments	124,794	162,250
Total restricted current assets	202,424	178,723
Total Current Assets	765,599	757,380
NONCURRENT ASSETS		
Restricted Noncurrent Assets:		
Cash and cash equivalents	107,182	55,453
Investments	165,826	296,728
Capital Assets:		
Utility plant in service	6,816,359	6,479,861
Less allowance for depreciation	2,204,823	2,082,961
	4,611,536	4,396,900
Land, water rights and other intangible assets	364,258	362,374
Construction in progress	673,633	506,810
Total capital assets (net of accumulated depreciation)	5,649,427	5,266,084
Total Noncurrent Assets	5,922,435	5,618,265
TOTAL ASSETS	6,688,034	6,375,645
DEFERRED OUTFLOWS OF RESOURCES		
Deferred charge on bond refunding	35,076	42,048
Deferred outflows - asset retirement obligations	32,354	32,511
Deferred outflows - pension	41,176	18,103
Deferred outflows - OPEB	19,270	15,308
Accumulated decrease in fair value of hedging derivative	12,256	9,332
Total Deferred Outflows of Resources	140,132	117,302
TOTAL ASSETS AND DEFERRED OUTFLOWS OF RESOURCES	$ 6,828,166	$ 6,492,947

San Antonio Water System
STATEMENTS OF NET POSITION (continued)
(amounts in thousands)

	December 31, 2019	December 31, 2018 Restated
CURRENT LIABILITIES		
Current Liabilities To Be Paid From Unrestricted Assets		
Accounts payable	$ 38,217	$ 41,715
Customers' deposits	16,008	15,571
Accrued vacation payable	5,890	5,685
Accrued payroll and benefits	5,642	4,966
Accrued claims payable	8,312	8,197
Sundry payables and accruals	1,415	1,630
Total unrestricted current liabilities	75,484	77,764
Current Liabilities To Be Paid From Restricted Assets		
Accrued interest payable	15,563	16,153
Payables under construction contracts	61,073	41,360
Commercial paper notes	4,055	3,880
Revenue bonds payable within one year	86,445	87,060
Total restricted current liabilities	167,136	148,453
Total Current Liabilities	242,620	226,217
NONCURRENT LIABILITIES		
Accrued vacation payable	4,983	4,128
Net pension liability	81,992	38,919
Net OPEB liability	78,691	88,180
Asset retirement obligation	35,084	34,120
Derivative instrument	15,097	12,516
Commercial paper notes	277,760	211,815
Revenue bonds payable after one year, net of unamortized premiums and discounts	2,648,630	2,747,510
Total Noncurrent Liabilities	3,142,237	3,137,188
TOTAL LIABILITIES	3,384,857	3,363,405
DEFERRED INFLOWS OF RESOURCES		
Deferred inflows - pension	1,886	17,807
Deferred inflows - OPEB	10,908	6,040
Total Deferred Inflows of Resources	12,794	23,847
TOTAL LIABILITIES & DEFERRED INFLOWS OF RESOURCES	3,397,651	3,387,252
NET POSITION		
Net investment in capital assets	2,758,354	2,355,450
Restricted for operating reserve	58,408	56,642
Restricted for debt service	67,380	64,086
Restricted for debt service reserve	23,122	54,702
Restricted for construction	163,313	209,204
Unrestricted	359,938	365,611
TOTAL NET POSITION	$ 3,430,515	$ 3,105,695

The accompanying notes to financial statements form an integral part of this statement.

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San Antonio Water System
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
For the Years Ended December 31,
(amounts in thousands)

	2019	2018 Restated
OPERATING REVENUES		
Water delivery system	$ 229,203	$ 218,399
Water supply system	218,842	202,674
Wastewater system	274,519	259,124
Chilled water system	10,615	10,849
Total operating revenues	733,179	691,046
OPERATING EXPENSES		
Salaries and fringe benefits	162,445	149,970
Contractual services	173,187	171,032
Material and supplies	26,469	23,485
Other charges	6,726	11,718
Less costs capitalized to construction in progress	(30,743)	(31,613)
Total operating expenses before depreciation	338,084	324,592
Depreciation and amortization expense	157,225	155,550
Total operating expenses	495,309	480,142
Operating income	237,870	210,904
NONOPERATING REVENUES		
Interest earned and miscellaneous	32,583	22,488
NONOPERATING EXPENSES		
Interest expense	96,420	88,542
Debt issuance and bond defeasance costs	2,627	1,711
Other finance charges	2,066	1,957
Loss on defeased debt	664	-
Gain on sale of capital assets	(886)	(924)
Payments to the City of San Antonio	21,917	18,287
Payments to other entities	99	101
Total nonoperating expenses	122,907	109,674
Increase in net position, before capital contributions	147,546	123,718
Capital contributions	177,274	145,990
CHANGE IN NET POSITION	324,820	269,708
NET POSITION, BEGINNING OF YEAR	3,105,695	2,835,987
NET POSITION, END OF YEAR	$ 3,430,515	$ 3,105,695

The accompanying notes to financial statements form an integral part of this statement.

San Antonio Water System
STATEMENTS OF CASH FLOWS
For the years ended December 31,
(amounts in thousands)

		2019		2018 Restated
CASH FLOWS FROM OPERATING ACTIVITIES				
Cash received from customers	$	722,533	$	692,882
Cash received from stormwater and other third party billings		62,608		60,200
Cash paid to vendors for operations		(208,112)		(198,126)
Cash paid to employees for services		(131,349)		(128,300)
Cash paid to third parties for stormwater and other third party billings		(63,782)		(59,963)
Net cash provided by operating activities		381,898		366,693
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES				
Payments to the City of San Antonio		(15,743)		(12,440)
Payments to other entities		(99)		(102)
Net cash used for noncapital financing activities		(15,842)		(12,542)
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES				
Proceeds from sale of capital assets		1,282		1,115
Proceeds from capital recovery fees		94,641		79,794
Proceeds from contributions in aid of construction		9,258		6,435
Payments for the acquisition and construction of plant and equipment		(451,384)		(305,551)
Proceeds from commercial paper		70,000		67,000
Payments for retirement of commercial paper		(3,880)		(3,710)
Proceeds from revenue bonds		198,670		82,101
Payments for retirement of revenue bonds		(96,281)		(84,875)
Payment for cash defeasance of bonds		(178,933)		-
Payments of interest on commercial paper		(5,849)		(5,490)
Payments of interest on revenue bonds		(108,148)		(107,469)
Payments for bond related expenses		(2,627)		(1,711)
Payments for bank charges		(2,369)		(1,999)
Net cash used for capital and related financing activities		(475,620)		(274,360)
CASH FLOWS FROM INVESTING ACTIVITIES				
Purchase of investments		(330,364)		(745,515)
Maturity of investments		573,156		646,050
Interest income and other		29,340		19,963
Net cash used for investing activities		272,132		(79,502)
NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS		162,568		289
CASH AND CASH EQUIVALENTS, AT BEGINNING OF YEAR		129,990		129,701
CASH AND CASH EQUIVALENTS, AT END OF YEAR	$	292,558	$	129,990

The accompanying notes to financial statements form an integral part of this statement.

San Antonio Water System
STATEMENTS OF CASH FLOWS (continued)
For the years ended December 31,
(amounts in thousands)

	2019	2018 Restated
RECONCILIATION OF CASH AND CASH EQUIVALENTS PER STATEMENTS OF CASH FLOWS TO STATEMENTS OF NET POSITION		
Cash and Cash Equivalents		
Unrestricted	$ 107,746	$ 58,064
Restricted		
Current	77,630	16,473
Restricted - Noncurrent	107,182	55,453
	$ 292,558	$ 129,990
RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES		
Operating Income	$ 237,870	$ 210,904
Adjustments to reconcile operating income to net cash provided by operating activities:		
Non-cash revenues from City of San Antonio	(6,174)	(5,847)
Provision for uncollectible accounts	5,849	4,844
Charge-off of prior year construction expenditures to operating expense	2,657	5,002
Depreciation expense	157,225	155,550
Change in assets, deferred outflows of resources, liabilities and deferred inflows of resources:		
(Increase)/Decrease in accounts receivable	(10,509)	1,386
(Increase)/Decrease in other current assets	(1,367)	(1,023)
(Increase)/Decrease in deferred outflows - Pension	(23,073)	15,325
(Increase)/Decrease in deferred outflows - OPEB	(3,962)	(1,598)
(Increase)/Decrease in accounts payable	(1,184)	4,825
Increase in customers' deposits	437	1,436
Increase in accrued vacation payable	1,060	269
Increase in accrued payroll and benefits	676	191
Increase/(Decrease) in claims payables	115	1,010
Increase in sundry payables and accruals	(252)	(1,211)
Increase/(Decrease) in net pension liability	33,584	(33,136)
Decrease in net OPEB liability		(12,753)
Increase/(Decrease) in deferred inflows - pension	(11,054)	15,479
Increase/(Decrease) in deferred inflows - OPEB	-	6,040
Total adjustments	144,028	155,789
Net cash provided by operating activities	$ 381,898	$ 366,693
NONCASH CAPITAL, FINANCING AND INVESTING ACTIVITIES		
Plant contributions received from developers	$ 73,374	$ 59,761
Accrued but unpaid liabilities related to capital acquisitions	61,073	41,841
Unrealized (gain)/loss on investments	(3,815)	(1,079)
Bond proceeds deposited into an escrow account for purposes of refunding:		
Revenue Bonds	100,837	40,755
Commercial Paper	-	125,655
Noncash payments to City of San Antonio	6,174	5,847
Total noncash capital and financing activities	$ 237,643	$ 272,780

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San Antonio Water System Fiduciary Funds
STATEMENTS OF FIDUCIARY NET POSITION
(amounts in thousands)

	December 31, 2019	December 31, 2018
ASSETS		
Cash and cash equivalents	$ 1,627	$ 1,323
Investments, at fair value		
Mutual funds - stock	185,036	154,396
Mutual funds - bonds	126,701	102,686
Other Investments	27,138	16,127
Total Investments	338,875	273,209
TOTAL ASSETS	340,502	274,532
LIABILITIES	-	-
NET POSITION RESTRICTED FOR POST EMPLOYMENT BENEFITS	$ 340,502	$ 274,532

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION
For the years ended December 31,
(amounts in thousands)

	2019	2018
ADDITIONS		
Employer contributions	$ 24,787	$ 24,783
Participant contributions	3,700	3,362
Investment income/(loss)	54,387	(11,427)
Total additions	82,874	16,718
DEDUCTIONS		
Benefit payments	16,370	17,257
Administrative expenses	534	538
Total deductions	16,904	17,795
NET INCREASE/(DECREASE) IN NET POSITION	65,970	(1,077)
NET POSITION RESTRICTED FOR POST EMPLOYMENT BENEFITS - BEGINNING	274,532	275,609
NET POSITION RESTRICTED FOR POST EMPLOYMENT BENEFITS - ENDING	$ 340,502	$ 274,532

The accompanying notes to financial statements form an integral part of these statements.

NOTES TO FINANCIAL STATEMENTS

NOTE A - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Reporting Entity: On April 30, 1992, the San Antonio City Council approved Ordinance No. 75686, which provided for the consolidation of all city owned utilities related to water including the water, wastewater, and water reuse systems as the San Antonio Water System (SAWS). Management and control of SAWS is vested in the SAWS Board of Trustees (Board) consisting of the Mayor of San Antonio and six members who are appointed by the San Antonio City Council. In addition to appointing members of the Board, the City Council must approve all changes in SAWS rates and any debt issued by SAWS.

SAWS has been defined in City Ordinance No. 75686 (City Ordinance) as all properties, facilities, and plants currently owned, operated and maintained by the City of San Antonio, Texas (the City) and/or the Board, for the supply, treatment, transmission and distribution of treated potable water, chilled water and steam, for the collection and treatment of wastewater and for water reuse, together with all future extensions, improvements, purchases, repairs, replacements and additions thereto, and any other projects and programs of SAWS. SAWS discontinued steam plant operations in 2014.

The City currently manages a stormwater system. The City has not incorporated the stormwater system within SAWS; however, SAWS administers certain aspects of the stormwater program on behalf of the City, including billing and providing certain technical services, for a fee. SAWS has agreements with the City (for stormwater billings) and other entities to provide third party billings.

The fiduciary financial statements include three fiduciary funds related to SAWS employee benefit plans: the San Antonio Water System Retirement Plan (SAWSRP), the District Special Project Retirement Income Plan (DSPRP) and the San Antonio Water System Retiree Health Trust (SAWS OPEB Plan). All three plans are governed by the Board which may amend plan provisions, and which is responsible for the management of plan assets. SAWSRP and DSPRP are single-employer pension plans and are tax-qualified plans under Section 401 (a) of the Internal Revenue Code. SAWS OPEB Plan assets are held in a trust established under the provisions of the Internal Revenue Code of 1986 Section 115.

SAWS has no component units, however, the operations of SAWS as reported herewith are included as a discretely presented component unit of the City.

Basis of Accounting: The financial statements of SAWS are prepared using the accrual basis of accounting with the economic resources measurement focus as prescribed by the Governmental Accounting Standards Board (GASB). SAWS operates as a proprietary fund and applies all applicable GASB pronouncements and presents its financial statements in accordance with the GASB Codification of Governmental Accounting and Financial Reporting Standards. Under this approach, all assets, deferred outflows of resources, liabilities and deferred inflows of resources of SAWS are reported in the statement of net position, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred.

The fiduciary fund financial statements are prepared using the accrual basis of accounting. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefit payments and plan expenses are recognized when due and payable in accordance with the terms of the plan.

SAWS implemented the following new GASB pronouncements during the current year:

- GASB Statement No. 83, *Certain Asset Retirement Obligations*. This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for Asset Retirement Obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. This Statement requires that recognition occur when the liability is both incurred and reasonably estimable. The determination of when the liability is incurred should be based on the occurrence of external laws, regulations, contracts, or court judgments, together with the occurrence of an internal event that obligates a government to perform asset retirement activities. This Statement requires the measurement of an ARO to be based on the best estimate of the current value of outlays expected to be incurred. This Statement requires the current value of a government's AROs to be adjusted for the effects of general inflation or deflation at least annually. This statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for legally enforceable asset retirement obligations and requires that recognition occur when the liability is both incurred and reasonably estimable. SAWS adopted the requirements of GASB Statement No. 83 effective January 1, 2018. SAWS presents two year comparative financial statements. As a result, 2018 was restated to recognize the ARO liability and outflow of resources associated with the AROs. Evaluation of current legally enforceable obligations related to SAWS assets resulted in the recognition of liabilities associated with wastewater treatment plants, underground storage tanks, and desalination injection wells. As of January 1, 2018, SAWS recorded an initial ARO liability of $33,638,000 and a corresponding deferred outflows of resources – AROs of $33,638,000. SAWS had previously recognized a liability of $482,000 for the retirement of the desalination injection wells as part of the permit process for the desalinization plant. This liability was re-classed to an ARO, which increased the total ARO liability at December 1, 2018 to $34,120,000. As of January 1, 2019, SAWS adjusted the ARO liability and deferred outflow for inflation by $964,000 by using the Producer Price Index (Non-Residential General Contractors – South issued by the Bureau of Labor and Statistics. SAWS recognized an outflow of resources resulting from the amortization of the ARO costs of $1,122,000 for 2019 and $1,128,000 for 2018. (See Note L for additional information on GASB Statement No. 83 and Note M for the restatement of net position).

- GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowing and Direct Placements*. This Statement defines debt for purposes of disclosure in notes to financial statements and establishes additional financial statement note disclosure requirements related to debt obligations of governments, including direct borrowing (for example, a government entering into a loan agreement with a lender) and direct placements (for example, a government issuing a debt security directly to an investor). Direct borrowings and direct placements have terms negotiated directly with the investor or lender and are not offered for public sale. A component of

SAWS fixed rate junior lien debt is direct placement debt with the Texas Water Development Board (TWDB). Direct placement debt with TWDB is offered at subsidized interest rates for qualified water, wastewater and water supply projects. See Note H – Long Term Debt for additional information on GASB Statement No. 88.

- GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period.* This Statement establishes accounting requirements for interest cost incurred before the end of a construction period. This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. This Statement required the provisions to be applied prospectively. As a result, interest cost incurred before the end of a construction period will no longer be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund as of January 1, 2019.

- GASB Statement No. 90, *Majority Equity Interests.* This Statement specifies that a majority equity interest in a legally separate organization should be reported as an investment if a government's holding of the equity interest meets the definition of an investment. A majority equity interest that meets the definition of an investment should be measured using the equity method, unless it is held by a special-purpose government engaged only in fiduciary activities, a fiduciary fund, or an endowment (including permanent and term endowments) or permanent fund. Those governments and funds should measure the majority equity interest at fair value. SAWS holds no equity interests in a legally separate organization at December 31, 2019.

The following additional GASB pronouncements will be implemented in the future. Once implemented, application of these standards may restate portions of these financial statements.

- GASB Statement No. 87, *Leases.* This Statement requires the recognition of certain lease assets and liabilities for leases that previously were classified as operating leases. 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, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019. SAWS will implement this Statement in 2020.

- GASB Statement No. 91, *Conduit Debt Obligations.* This Statement provides a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with commitments extended by issuers, arrangements associated with conduit debt obligations and related note disclosures. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020. SAWS will implement this Statement in 2021.

- GASB Statement No. 92, *Omnibus 2020*. This objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB statements. This Statement includes specific provisions regarding GASB Statements No. 73, No. 74, No. 84 and No. 87. The requirements of this Statement are effective for reporting periods beginning after June 15, 2020. SAWS will implement this Statement in 2021.

Recognition of Revenues: Revenues are recognized as goods or services are provided. Customers' meters are read and bills are prepared monthly based on billing cycles. SAWS uses historical information to estimate and record earned revenue not yet billed.

Revenue and Expense Classification: Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of SAWS are charges to customers for water supply, water delivery, wastewater, and chilled water services. Operating expenses include costs of service, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Pensions: For purposes of measuring the Net Pension Liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the SAWSRP, TMRS and DSPRP plans and additions to/from the SAWSRP, TMRS and DSPRP fiduciary net position have been determined using the same basis as they are reported by SAWSRP, TMRS and DSPRP. For this purpose, benefit payments, including refunds of employee contributions, are recognized when due and payable in accordance with benefit terms. Investments are reported at fair value.

Postemployment Benefits Other Than Pensions (OPEB): For purposes of measuring the Net OPEB Liability, deferred outflows of resources and deferred inflows of resources related to SAWS OPEB, and SAWS OPEB expense, information about the fiduciary net position of the SAWS OPEB plan and additions to/from the SAWS OPEB fiduciary net position have been determined using the same basis as they are reported by the SAWS OPEB plan. For this purpose, benefit payments, including refunds of employee contributions, are recognized when due and payable in accordance with benefit terms. Investments are reported at fair value.

Annual Budget: Approximately sixty days prior to the beginning of each fiscal year, an annual budget is presented to the Board for consideration. This budget is prepared on an accrual basis and serves as a tool in controlling and administering the management and operation of the organization. The annual budget reflects an estimate of gross revenues and disposition of these revenues in accordance with the flow of funds required by Ordinance No. 75686 (See Note B). Once the annual budget has been approved by the Board, the budget is submitted to City Council for review and consultation.

Restricted Resources: When an expenditure is made for purposes for which both restricted and unrestricted resources are available, it is SAWS policy to choose the appropriate resource based on the availability of resources and funding goals established by management for those expenditures.

Cash Equivalents: SAWS considers investments with an original maturity of three months or less at the time of purchase to be cash equivalents.

Investments: City Ordinance No. 75686, SAWS' Investment Policy and Texas state law allow SAWS to invest in direct obligations of the United States or its agencies and instrumentalities. Other allowable investments include direct obligations of the State of Texas or its agencies and instrumentalities; secured certificates of deposit issued by depository institutions that have their main office or a branch office in the State of Texas; defined bankers acceptances and commercial paper; collateralized direct repurchase agreements, reverse repurchase agreements; no-load money market mutual funds; investment pools; municipal bonds; and other types of secured or guaranteed investments. These investments are subject to market risk, interest rate risk, and credit risk which may affect the value at which these investments are recorded. Under the provisions of GASB Statement No. 31, money market investments, including US Treasury and agency obligations, with a remaining maturity at time of purchase of one year or less are reported at amortized cost. All other investments are reported at fair value.

Accounts Receivable: Accounts receivable are recorded at the invoiced amounts plus an estimate of unbilled revenue receivable. The allowance for uncollectible accounts is management's best estimate of the amount of probable credit losses based on account delinquencies and historical write-off experience. Account balances are written off against the allowance when it is probable the receivable will not be recovered. SAWS wrote off account balances totaling $7.8 million in 2019 and $5.4 million in 2018. A provision to increase the allowance for uncollectible accounts is recorded as an offset to operating revenue. The provision recorded to offset revenues was $5.8 million in 2019 and $4.8 million in 2018.

Inventory: Inventories are valued at lower of cost or market using the weighted average cost method. Inventories are reported in the Statements of Net Position in Other Current Assets. Inventories (net) totaled $5.7 million at December 31, 2019 and $5.8 million at December 31, 2018.

Restricted Assets: Assets restricted by City Ordinance, which incorporates the bond indentures, to pay current liabilities are reported as current assets in the Statement of Net Position, regardless of their relative liquidity. Assets restricted for the acquisition of capital assets or to pay noncurrent liabilities are reported as noncurrent assets in the Statement of Net Position.

Capital Assets: Assets in service are capitalized when the unit cost is greater than or equal to $5,000. Utility plant additions are recorded at cost, which includes materials, labor and direct internal costs during construction. Included in capital assets are intangible assets, which consist of purchased water rights and land easements, costs associated with acquiring additional Certificates of Convenience and Necessity (CCN) related to new service areas and development costs for internally generated computer software. Assets acquired through capital leases are recorded on the cost basis and included in utility plant in service. Assets acquired through contributions, such as those from developers, are recorded at estimated acquisition value at date of donation. Maintenance, repairs, and minor renewals are charged to operating expense; major plant replacements are capitalized.

Capital assets are depreciated on the straight-line method. This method is applied to all individual assets except distribution and collection mains and intangible assets. Groups of mains are depreciated on the straight-line method over an estimated average useful life of 50 years. Mains are included in the Distribution and transmission system asset category and the Collection system category. Intangible assets not considered to have indefinite useful lives are amortized over their estimated useful life. Capital assets are tested for impairment when a significant unexpected decline in its service utility occurs. The following table shows an estimated range of useful lives used in providing for depreciation of capital assets:

Structures and improvements	25 - 50	years
Pumping and purification equipment	10 - 50	years
Distribution and transmission system	17.5 - 50	years
Collection system	50	years
Treatment facilities	25	years
Equipment and machinery	5 - 20	years
Furniture and fixtures	3 - 10	years
Computer equipment	5	years
Software	3 - 10	years
Intangible assets (definite useful life)	20	years

Capitalized Interest: SAWS implemented GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period* effective January 1, 2019. In accordance with this Statement, SAWS no longer capitalizes interest expense during the construction period. SAWS capitalized $6.6 million of interest in 2018.

Capital Contributions: Capital Contributions consist of plant contributions from developers, capital recovery fees, and contributions in aid of construction and/or grant proceeds received from governmental agencies for facility expansion. Capital Contributions are recognized in the Statement of Revenues, Expenses, and Changes in Net Position, after non-operating revenues (expenses), when eligibility requirements are met.

Capital recovery fees are charged to customers to connect to the water or wastewater system. By Texas law, these fees are to be used for capital expenditures that expand infrastructure capacity or to reimburse SAWS for the cost associated with existing excess infrastructure capacity. In certain instances, infrastructure that facilitates expansion of SAWS' service capacity is contributed by developers. In these instances, SAWS records the donated infrastructure as plant contributions and may abate future capital recovery fees due from the developer equal to a portion of the acquisition value of the of the infrastructure contributed. SAWS abated future capital recovery fees of $4.4 million in 2019 and $337,000 in 2018. These abatements are conditional based on the type of development and in certain instances, time requirements and geographic restrictions.

Deferred Outflows and Inflows of Resources: In addition to assets, liabilities, and net position, the Statement of Net Position includes separate sections for deferred outflows and inflows of resources. A deferred outflow of resources represents a consumption of net position that applies to a future period(s) and therefore, will not be recognized as an outflow of resources until the applicable future period. A deferred inflow of resources is an acquisition of net position that is applicable to future reporting period(s) and therefore, will not be recognized as an inflow of resources until the applicable future period.

Deferred charge on bond refunding results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized to interest expense over the shorter of the life of the refunded or refunding debt using the interest method.

Deferred Outflows – Unamortized Asset Retirement Obligations result from unamortized asset retirement obligation costs. This amount is deferred and amortized to depreciation and amortization expense based on the ARO's remaining useful life.

Deferred outflows – pension and *Deferred inflows – pension* result from contributions made by SAWS to its defined benefit pension plans after the measurement date of Net Pension Liability as well as changes in the Net Pension Liability not yet reflected in pension expense. Changes in the Net Pension Liability not yet reflected in pension expense include differences between projected and actual earnings on pension plan investments, expected and actual experience with regard to economic or demographic factors and changes in assumptions about future economic or demographic factors. Differences between projected and actual earnings are recognized in pension expense over a closed five year period. Other changes are recognized in pension expense using a systematic and rational manner over a closed period equal to the average of the expected remaining service lives of all employees participating in the plans.

Deferred outflows – OPEB and *Deferred inflows – OPEB* result from contributions made by SAWS to its OPEB plan after the measurement date of Net OPEB Liability as well as changes in the Net OPEB Liability not yet reflected in OPEB expense. Changes in the Net OPEB Liability not yet reflected in OPEB expense include differences between projected and actual earnings on OPEB plan investments, expected and actual experience with regard to economic or demographic factors and changes in assumptions about future economic or demographic factors. Differences between projected and actual earnings are recognized in OPEB expense over a closed five year period. Other changes are recognized in OPEB expense using a systematic and rational manner over a closed period equal to the average of the expected remaining service lives of all employees participating in the plans.

SAWS is a party to an interest rate swap agreement which serves to hedge interest rates on a portion of SAWS' variable rate debt. The agreement qualifies as a derivative instrument and meets the requirements of an effective hedge in accordance with GASB Statements No. 53 and 64. As a result, hedge accounting is used to account for the changes in the fair value of the swap agreement. *Accumulated decrease in fair value of hedging derivative* represents the change in the fair value of the interest rate swap that has not been recognized in the Statement of Revenues, Expenses and Changes in Net Position due to the use of hedge accounting. For more information about this derivative instrument see Note G.

Customer Deposits: SAWS collects an advance deposit from new customers to secure payment of the customer's final bill. The deposit is refundable once the customer has demonstrated an acceptable payment history of no more than two late payments within the first twelve month period. SAWS may collect an additional deposit for customers whose service has been turned off for non-payment and need to restore service.

Compensated Absences: It is SAWS' policy to accrue earned but unused employee vacation pay as well as the employer portion of Social Security taxes and required employer pension contributions related to the accrued vacation pay. The total vacation paid in the current year is used as the estimated amount to be due within one year. Sick leave is not accrued as a terminating employee is not paid for accumulated sick leave.

Revenue Bonds & Commercial Paper: SAWS issues revenue bonds to finance capital improvement projects, refund outstanding bonds to reduce future debt service payments, and pay the cost of issuance. All SAWS' revenue bonds are secured by a lien on and pledge of net revenues of the system. Additionally, certain SAWS' bonds are further secured by the maintenance of a reserve fund established for the benefit of the bondholders. SAWS maintains a commercial paper program that is used to provide funds for the interim financing of a portion of its capital improvements.

Self-Insurance: SAWS is self-insured for a portion of workers' compensation, employee's health, employer's liability, public officials' liability, property damage and certain elements of general liability. A liability has been recorded for the estimated amount of eventual loss, which will be incurred on claims arising prior to the end of the period including incurred but not reported claims.

Derivative Instrument: As noted above, SAWS is a party to an interest rate swap agreement that qualifies as a derivative instrument. Additionally, mutual fund investments held by SAWS fiduciary funds may use derivatives as part of their investment strategy. These mutual funds are comingled pools, rather than individual securities.

Estimates: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

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

NOTE B - CITY ORDINANCE NO. 75686

Funds Flow: City Ordinance requires that SAWS' gross revenues be applied in sequence to: (1) System Fund for payment of current maintenance and operating expenses including a reserve equal to two months of budgeted maintenance and operating expenses for the current fiscal year; (2) Debt Service Fund requirements of Senior Lien Obligations; (3) Reserve Fund requirements of Senior Lien Obligations; (4) Interest and Sinking Fund and Reserve Fund requirements of Junior Lien Obligations; (5) Interest and Sinking Fund and Reserve Fund requirements of Subordinate Lien Obligations; (6) Payment of amounts required on Inferior Lien Obligations, and (7) Transfers to the City's General Fund and to the Renewal and Replacement Fund.

Payments to the City's General Fund: The City Ordinance requires SAWS to make payments to the City each month after making all other payments required by the City Ordinance. The amount of the payment is determined by City Council from time to time and cannot exceed 5% of Gross Revenues. Gross Revenues consist of all revenue with respect to the operation and ownership of SAWS with the exception of capital contributions, payments received under the CPS Energy contract, the federal subsidy of interest on Build America Bonds and earnings on funds deposited in the Project Fund and Reserve Fund until the Reserve Fund contains the required reserve amount. In October 2019, SAWS payment to the City was increased from 2.7% to 4.0% of Gross Revenues. Payments to the City are reported as non-operating expense in the Statement of Revenues, Expenses and Changes in Net Position.

Reuse Contract: SAWS has a contract with CPS Energy, the city owned electricity and gas utility, for the provision of reuse water. According to the City Ordinance, the revenues derived from the contract have been restricted in use to only reuse activities and are excluded from gross revenue for purposes of calculating any payments to the City's General Fund.

Pledged Revenues: Net Revenues of SAWS have been pledged to the payment and security of its debt obligations. Net Revenues are defined by the City Ordinance as SAWS' Gross Revenues after deducting operating expenses before depreciation.

No Free Service: The City Ordinance also provides for no free services except for municipal fire-fighting purposes.

NOTE C – CASH AND INVESTMENTS

San Antonio Water System

The following is a reconciliation of cash and investments reported in the Statements of Net Position to deposits and investments disclosed in this note for December 31, 2019 and 2018.

(amounts in thousands)	December 31, 2019	December 31, 2018
Reported in Statements of Net Position:		
Cash and Cash Equivalents:		
Unrestricted	$ 107,747	$ 58,064
Restricted - current	77,630	16,473
Restricted - noncurrent	107,182	55,453
Total cash and cash equivalents	292,559	129,990
Investments:		
Unrestricted	382,331	436,823
Restricted - current	125,359	162,250
Restricted - noncurrent	149,041	296,728
Total investments	656,731	895,801
Total Cash, Cash Equivalents and Investments	$ 949,290	$ 1,025,791
Reported amounts in note for:		
Deposits	$ (1,540)	$ 9,112
Investments	950,830	1,016,679
Total Deposits and Investments	$ 949,290	$ 1,025,791

Deposits: As of December 31, 2019, SAWS' funds are deposited in demand and savings accounts at JP Morgan Chase, SAWS' general depository bank. As required by state law, all SAWS' deposits are fully collateralized and/or are covered by federal depository insurance. At December 31, 2019 and 2018, the collateral pledged was held by the Federal Home Loan Bank – Dallas and Federal Reserve Bank – Boston, respectively, under SAWS' name so SAWS incurred no custodial credit risk. At December 31, 2019, the bank balance of SAWS' demand and savings accounts was $1,762,000 and the reported amount was ($1,540,000) which included $27,000 of cash on hand. At December 31, 2018, the bank balance of SAWS' demand and savings accounts was $7,665,000 and the reported amount was $9,112,000 which included $27,000 of cash on hand.

Investments: As of December 31, 2019, investments include securities issued by the United States government and its agencies and instrumentalities, municipal securities, money market funds and investment pools. Securities purchased are held in custody by Bank of New York Mellon and registered as securities of SAWS. Money Market Funds are managed by Fidelity Institutional, and Bank of New York Mellon and are invested in securities issued by the U.S. government or by U.S. Agencies. Funds in investment pools are invested in TexPool Prime and Texas Class Investment Pool. Both pools may invest in commercial paper and certificates of deposit, as well as obligations of the U.S. government or its agencies and instrumentalities, and repurchase agreements as allowed under the Public Funds Investment Act (PFIA). All investments in money market funds and investment pools are reported at amortized cost. Amortized cost approximates fair value for these investments.

The following tables provide information related to SAWS investments at December 31, 2019 and 2018.

December 31, 2019
(dollars in thousands)

Investment Type	Reported Value	Fair Value	Allocation Based on Fair Value	Standard & Poors Rating	Weighted Average Maturity (in days)
U.S. Treasury Securities	$ 149,934	$ 149,934	16%	AA+	404
U.S. Agency Notes	436,818	436,818	46%	AA+	445
Municipal Bonds	69,979	69,979	7%	AAA/AA-	792
Money Market Mutual Funds held in Escrow:					
Bank of New York Mellon	21,137	21,137	2%	AAAm	1
Fidelity Instituional MMF	29,687	29,687	3%	AAAm	1
Texas Class Investment Pool	125,644	125,644	13%	AAAm	1
Texpool Prime Local Government Pool	117,631	117,631	12%	AAAm	1
Total Investments	$ 950,830	$ 950,830	100%		326

December 31, 2018
(dollars in thousands)

Investment Type	Reported Value	Fair Value	Allocation Based on Fair Value	Standard & Poors Rating	Weighted Average Maturity (in days)
U.S. Treasury Securities	$ 262,934	$ 262,910	28%	AA+	352
U.S. Agency Notes	626,801	626,796	66%	AA+/A-1+	397
Municipal Bonds	6,066	6,066	1%	AA/AA+	712
Money Market Mutual Funds held in Escrow:					
Bank of New York Mellon	20,691	20,691	2%	AAAm	1
US Bank	946	946	0%	AAAm	1
UMB Bank	7,987	7,987	1%	AAAm	1
Frost Bank	9,025	9,025	1%	AAAm	1
Texpool Prime Local Government Pool	82,229	82,229	9%	AAAm	1
Total Investments	$ 1,016,679	$ 1,016,650	107%		340

Interest Rate Risk: Interest rate risk is the risk that a change in market interest rates of fixed income securities will adversely affect the fair value of an investment. As a means of limiting its exposure to fair value losses due to rising interest rates, SAWS' investment policy limits its investments maturities to no more than five years. At December 31, 2019 the longest remaining maturity for any investment was slightly under five years and 65% of the investment portfolio matures in less than one year.

Credit Risk: Credit risk is the risk that an issuer of financial securities will not fulfill its obligations to the holder of the obligation. In accordance with its investment policies, SAWS manages exposure to credit risk by limiting its investments in long-term obligations of other states and cities to those with a credit rating of "A" or better. Additionally, any short-term investments require a rating of at least "A-1" or "P-1".

Concentration of Credit Risk: Concentration of credit risk for investments is the risk of loss attributable to the magnitude of an investment in a single issuer. SAWS' investment policy does not limit the amount it may invest in U.S. Treasury securities, government-guaranteed securities, or government-sponsored entity securities. However, in order to manage its exposure to concentration of credit risk, the investment policy does limit the amount that can be invested in any one government-sponsored issuer to no more than 50% of the total investment portfolio, and no more than 30% of the total investment portfolio in any non-government issuer unless it is fully collateralized.

Custodial Credit Risk: Custodial credit risk is the risk that, in the event of a financial institution failure, SAWS' deposits or collateral securities may not be returned to it. For SAWS, this risk is completely mitigated by (1) insurance coverage provided by the custodian that protects against loss of cash or securities held in custody and (2) collateral in the form of Treasury Securities over the Federal Deposit Insurance Corporation limit. Texas public fund accounts are collateralized at 100%.

As of December 31, 2019 and 2018, the percentage of the investment portfolio for government-sponsored issuers was as follows:

	December 31,	
	2019	2018
Federal Home Loan Bank	14%	26%
Federal Farm Credit Bank	14%	16%
Federal Home Loan Mortgage Corporation	12%	9%
Federal National Mortgage Association	5%	10%
Federal Agricultural Mortgage Corporation	2%	1%

Fair Value Measurement: SAWS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. The following tables summarize SAWS investments by the fair value hierarchy as of December 31, 2019 and 2018.

(amounts in thousands)	December 31, 2019	Fair Value Measurements Using Level 1	Level 2	Level 3
Investments by fair value level				
U.S. Treasury Securities	$ 149,934	$ 149,934	$ -	$ -
U.S. Agency Notes	436,818	-	436,818	-
Municipal Bonds	69,979	-	69,979	-
Total investments measured at fair value	$ 656,731	$ 149,934	$ 506,797	$ -

(amounts in thousands)	December 31, 2018	Fair Value Measurements Using Level 1	Level 2	Level 3
Investments by fair value level				
U.S. Treasury Securities	$ 262,910	$ -	$ 262,910	$ -
U.S. Agency Notes	626,796	-	626,796	-
Municipal Bonds	6,066	-	6,066	-
Total investments measured at fair value	$ 895,772	$ -	$ 895,772	$ -

Securities classified in Level 2 of the fair value hierarchy are valued using interest rate curves and credit spreads applied to the terms of the debt instruments (maturity and coupon interest) and consider the counterparty rating.

Restricted Cash and Investments: Cash and investments are restricted for a variety of purposes based on the requirement set forth in City Ordinance 75686, state law or SAWS policy. The following table summarizes both current and noncurrent restricted cash and investments by purpose at December 31, 2019 and 2018.

(amounts in thousands)	December 31, 2019	2018
Restricted for:		
Operations	$ 58,408	$ 56,642
Debt Service	82,943	80,239
Debt Service Reserve	56,277	87,147
Construction - accrued liabilities	61,073	41,841
Construction - capital recovery fees	163,313	209,204
Construction - bond proceeds	53,418	55,830
Total Restricted Cash & Investments	$ 475,432	$ 530,904

The requirements of City Ordinance 75686 stipulate that SAWS must accumulate and maintain a reserve equal to 100% of the maximum annual debt service requirements for senior lien debt obligations. Additional City ordinances require SAWS to maintain a debt service reserve equal to the average annual debt service on all junior lien debt obligations secured by a reserve fund. Not all SAWS junior lien debt obligations require the security of a debt service reserve. Increases in the required reserve amount may be deposited into a reserve account over a five year period. Ordinance 75686 allows for SAWS to provide surety policies equal to all or part of the required reserve. SAWS may use bond proceeds to make the required deposits related to new debt issued. Debt service reserve deposits are required to be maintained until a) the revenue bonds mature, b) the surety policy provider's credit ratings improve to the minimum ratings required under SAWS bond ordinance, or c) new surety policies are provided that meet the requirements of the bond ordinance.

The following table summarizes the cash and investments restricted for Debt Service Reserve at December 31, 2019 and 2018 based on the allocation of the funds between junior lien and senior lien bond requirements.

	December 31,			
(amounts in thousands)	2019		2018	
Restricted for Junior Lien Bonds	$	15,930	$	18,441
Restricted for Senior Lien Bonds		40,347		68,706
Total Cash & Investments - Debt Service Reserve	$	56,277	$	87,147

Funds restricted for construction include amounts needed to pay accrued construction liabilities, collected but unspent capital recovery fees and unspent bond proceeds. Funds restricted for accrued construction liabilities and unspent bond proceeds are completely offset by related liabilities. By state law, capital recovery fees are restricted for the construction of the infrastructure upon which the calculation of the fee is based.

San Antonio Water System Fiduciary Funds

The fiduciary financial statements include three fiduciary funds related to SAWS employee benefit plans: the San Antonio Water System Retirement Plan (SAWSRP), the District Special Project Retirement Income Plan (DSPRP) and the San Antonio Water System Retiree Health Trust (SAWS OPEB Trust).

While the SAWSRP and DSPRP plans have no specific policy relating to plan investments, plan trustees have instituted a plan to invest approximately 60% of plan assets in equity securities and the remainder in fixed income securities. Plan investments are not automatically rebalanced, however, contributions to the plan are invested in a manner to adhere to the investment plan.

In 2012, SAWS established the SAWS OPEB Plan for the exclusive purpose of funding health and life benefits provided to eligible retirees and their dependents. It is the policy of SAWS OPEB Plan to invest 50% - 70% of its assets in equity securities, 25% - 50% in fixed income securities and 0% - 5% in cash. SAWS OPEB Plan utilizes an investment manager to make recommendations as to the appropriate target portfolio weightings among major asset classes. Additionally, the investment manager has full discretionary authority to buy, hold, and sell investments subject to the guidelines as defined in SAWS OPEB Plan's investment policy.

The following tables summarize fiduciary fund investments by plan and in total at December 31, 2019 and 2018.

December 31, 2019
(dollars in thousands)

Investment Type	SAWSRP	DSPRP	SAWS OPEB Plan	Total All Plans	Allocation Based on Fair Value
Collective, Pooled & Mutual Funds:					
Domestic Equity	$ 88,634	$ 3,755	$ 37,738	$ 130,127	38.2%
International Equity	42,168	128	12,613	54,909	16.1%
Domestic Debt	95,038	364	31,299	126,701	37.2%
Real Estate	16,643	-	-	16,643	4.9%
Balanced/Asset Allocation	8,090	-	-	8,090	2.4%
Commodities	-	57	-	57	0.0%
Money Market Mutual Funds	-	-	1,627	1,627	0.5%
Standard Insurance Company:					0.0%
Guaranteed Long-term Fund	-	2,348	-	2,348	0.7%
Total Investments	$ 250,573	$ 6,652	$ 83,277	$ 340,502	100.0%

December 31, 2018
(dollars in thousands)

Investment Type	SAWSRP	DSPRP	SAWS OPEB Plan	Total All Plans	Allocation Based on Fair Value
Collective, Pooled & Mutual Funds:					
Domestic Equity	$ 73,450	$ 3,021	$ 29,289	$ 105,760	38.5%
International Equity	34,581	109	9,429	44,119	16.1%
Domestic Debt	79,684	354	22,648	102,686	37.4%
Real Estate	14,072	-	-	14,072	5.1%
Balanced/Asset Allocation	4,517	-	-	4,517	1.6%
Commodities	-	56	-	56	0.0%
Money Market Mutual Funds	-	-	1,323	1,323	0.5%
Standard Insurance Company:					0.0%
Guaranteed Long-term Fund	-	1,999	-	1,999	0.7%
Total Investments	$ 206,304	$ 5,539	$ 62,689	$ 274,532	100.0%

The Standard Insurance Company Guaranteed Long-term Fund is reported at contract value at December 31, 2019 and 2018. Money market mutual funds are reported at amortized cost, which approximates fair value. Money market funds are reported as Cash and Cash Equivalents in the Statements of Fiduciary Net Position.

Fair Value: SAWS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs. Pricing for Level 1 inputs are provided by a pricing service as of the measurement date using pricing from exchanges. Pricing for Level 2 inputs are provided by various sources such as issuer, investment managers or fund accountants.

The following tables summarize SAWS investments by the fair value hierarchy as of December 31, 2019 and 2018.

(dollars in thousands) Investment Type	December 2019	Fair Value Measurement Using Level 1	Level 2	Level 3
Collective and Pooled Funds				
Domestic Equity	$ 130,127	$ 88,634	$ 41,493	$ -
International Equity	54,909	47,476	7,433	-
Domestic Debt	126,701	105,647	21,054	-
Real Estate	16,643	16,643	-	-
Balanced/Asset Allocation	8,090	8,090	-	-
Commodities	57	-	57	-
Total Investments	$ 336,527	$ 266,490	$ 70,037	$ -

(dollars in thousands) Investment Type	December 2018	Fair Value Measurement Using Level 1	Level 2	Level 3
Collective and Pooled Funds				
Domestic Equity	$ 105,769	$ 73,459	$ 32,310	$ -
International Equity	44,110	41,417	2,693	-
Domestic Debt	102,686	80,038	22,648	-
Real Estate	14,072	14,072	-	-
Balanced/Asset Allocation	4,517	4,517	-	-
Commodities	56	-	56	-
Total Investments	$ 271,210	$ 213,503	$ 57,707	$ -

Fiduciary Fund investments are not subject to the Public Funds Investment Act. The investments are subject to the following risks:

Credit Risk: The individual investments held by the Collective, Pooled and Mutual funds at December 31, 2019 and December 31, 2018 were not rated. The Standard Insurance Company Guaranteed Long-term Fund had a rating of A- by Standard & Poors at December 31, 2019 and 2018.

Concentration of Credit Risk: As of December 31, 2019 and 2018, more than 99% of fiduciary fund investments were in collective, pooled and mutual funds. The following funds exceeded 5% of fiduciary net position:

	December 31, 2019
Principal Core Plus Bond Separate Account-Z	23.65%
Principal LargeCap S&P 500 Index Separate Account-Z	13.74%
Principal Diversified International Separate Account-Z	7.31%
Principal MidCap S&P 400 Index Separate Account-Z	7.21%
Principal SmallCap S&P 600 Index Separate Account-Z	5.08%
Principal International SmallCap Separate Account-Z	5.08%

	December 31, 2018
Principal Core Plus Bond Separate Account-Z	24.64%
Principal LargeCap S&P 500 Index Separate Account-Z	14.13%
Principal MidCap S&P 400 Index Separate Account-Z	7.40%
Principal Diversified International Separate Account-Z	7.39%
Principal SmallCap S&P 600 Index Separate Account-Z	5.23%
Principal International SmallCap Separate Account-Z	5.20%
Principal U.S. Property Separate Account-Z	5.13%

Interest Rate Risk: The effective duration of the Domestic Debt funds was 5.4 years at December 31, 2019 and 5.6 years at December 31, 2018. The Standard Insurance Company Guaranteed Long-term Fund had an effective duration of 4.8 years at December 31, 2018 and 4.9 years at December 31, 2019.

NOTE D – ACCOUNTS RECEIVABLE

Accounts receivable consisted of the following at December 31, 2019 and 2018:

(amounts in thousands)	2019	2018
Current:		
Receivable from customers	$ 43,260	$ 42,126
Unbilled revenue	35,839	33,213
Receivable from insurance claims & governmental agencies	1,256	1,593
Less: Allowance for doubtful accounts	(6,205)	(7,442)
Total accounts receivable	$ 74,150	$ 69,490

NOTE E – CAPITAL ASSETS

A summary of capital asset activity for the year ended December 31, 2019 is as follows:

(amounts in thousands)

	December 31, 2018	Increases	Transfers	Decreases	December 31, 2019
Capital Assets, not being depreciated:					
Land	$ 113,123	$ 204	$ 1,914	$ 234	$ 115,007
Water rights purchased	248,881	-	-	-	248,881
Other intangible assets	370	-	-	-	370
Construction in progress	506,810	532,265	(362,785)	2,657	673,633
Total capital assets, not being depreciated/amortized	869,184	532,469	(360,871)	2,891	1,037,891
Capital assets, being depreciated					
Structures and improvements	825,607	493	30,487	-	856,587
Pumping and purification equipment	248,214	951	5,811	189	254,787
Distribution and transmission system	2,580,582	-	110,956	6,441	2,685,097
Treatment facilties	2,435,022	65	182,326	21,672	2,595,741
Equipment and machinery	306,784	6,565	31,291	5,346	339,294
Furniture and fixtures	6,595	-	-	-	6,595
Computer equipment	23,457	1,825	-	821	24,461
Software	52,246	197	-	-	52,443
Other intangible assets	1,354	-	-	-	1,354
Total capital assets being depreciated/amortized	6,479,861	10,096	360,871	34,469	6,816,359
Less accumulated depreciation					
Structures and improvements	(231,813)	(21,773)	-	-	(253,586)
Pumping and purification equipment	(78,064)	(8,213)	-	(189)	(86,088)
Distribution and transmission system	(772,617)	(51,985)	-	(6,441)	(818,161)
Treatment facilties	(799,108)	(48,456)	-	(21,671)	(825,893)
Equipment and machinery	(144,122)	(19,863)	-	(5,165)	(158,820)
Furniture and fixtures	(6,147)	(76)	-	-	(6,223)
Computer equipment	(18,128)	(1,877)	-	(776)	(19,229)
Software	(32,379)	(3,793)	-	-	(36,172)
Other intangible assets	(583)	(68)	-	-	(651)
Total accumulated depreciation	(2,082,961)	(156,104)	-	(34,242)	(2,204,823)
Total capital assets, being depreciated/amortized	4,396,900	(146,008)	360,871	227	4,611,536
Capital assets, net	$ 5,266,084	$ 386,461	$ -	$ 3,118	$ 5,649,427

A summary of capital asset activity for the year ended December 31, 2018 is as follows:

(amounts in thousands)

	December 31, 2017	Increases	Transfers	Decreases	December 31, 2018
Capital Assets, not being depreciated:					
Land	$ 106,995	$ 1,358	$ 4,867	$ 97	$ 113,123
Water rights purchased	248,677	-	204	-	248,881
Other intangible assets	370	-	-	-	370
Construction in progress	332,635	361,728	(182,551)	5,002	506,810
Total capital assets, not being depreciated/amortized	688,677	363,086	(177,480)	5,099	869,184
Capital assets, being depreciated					
Structures and improvements	990,234	265	(163,937)	955	825,607
Pumping and purification equipment	246,915	191	1,124	16	248,214
Distribution and transmission system	2,624,318	-	57,464	101,200	2,580,582
Treatment facilties	2,257,245	103	269,606	91,932	2,435,022
Equipment and machinery	293,596	8,077	8,065	2,954	306,784
Furniture and fixtures	6,595	-	-	-	6,595
Computer equipment	24,538	2,051	(139)	2,993	23,457
Software	47,187	149	5,297	387	52,246
Other intangible assets	1,354	-	-	-	1,354
Total capital assets being depreciated/amortized	6,491,982	10,836	177,480	200,437	6,479,861
Less accumulated depreciation					
Structures and improvements	(259,147)	26,397		(937)	(231,813)
Pumping and purification equipment	(70,252)	(7,828)	-	(16)	(78,064)
Distribution and transmission system	(824,043)	(49,774)	-	(101,200)	(772,617)
Treatment facilties	(794,179)	(96,861)	-	(91,932)	(799,108)
Equipment and machinery	(127,564)	(19,484)	-	(2,926)	(144,122)
Furniture and fixtures	(6,065)	(82)	-	-	(6,147)
Computer equipment	(19,079)	(1,994)		(2,945)	(18,128)
Software	(28,042)	(4,724)	-	(387)	(32,379)
Other intangible assets	(511)	(72)	-	-	(583)
Total accumulated depreciation	(2,128,882)	(154,422)	-	(200,343)	(2,082,961)
Total capital assets, being depreciated/amortized	4,363,100	(143,586)	177,480	94	4,396,900
Capital assets, net	$ 5,051,777	$ 219,500	$ -	$ 5,193	$ 5,266,084

In 2018, SAWS also evaluated the distribution and transmission mains and retired approximately $200 million of fully depreciated assets.

Asset Impairment: SAWS periodically reviews its capital assets for possible impairment. As part of SAWS' capital improvement program, SAWS incurs costs to design capital improvement projects. These costs are included in capital assets as Construction in Progress. Periodically the actual construction of these projects may not occur due to changes in plans. Once it has been determined that construction will not proceed, any capitalized costs are charged off to operating expenses. Design and project costs written off totaled $2.7 million in 2019 and $5.0 million in 2018.

SAWS owns a water treatment plant in southwest Bexar County to treat water supplied from Medina Lake and the Medina River. During the height of the 2011 - 2014 drought, Medina Lake water levels were greatly diminished leading to poor water quality. As a result, the treatment plant was idled from April 2013 through August 2015. Due to heavy rainfall during the summer of 2015, lake levels increased to a peak of nearly 80% of capacity. SAWS restarted the treatment plant on September 1, 2015 and treated approximately 500 acre-feet of Medina River water. Water quality concerns persisted and SAWS elected to idle the treatment plant again in October 2015. Additional investments in the treatment process may be required in order to eliminate these water quality concerns in the future. Current available water supplies are expected to be sufficient to meet customers' demand in the foreseeable future without utilizing the Medina supplies. The book value of the treatment plant at December 31, 2019 was $11.7 million. SAWS is continuing to depreciate the treatment plant and management does not currently believe the plant has been permanently impaired.

NOTE F – OTHER LIABILITIES

Accrued Vacation Payable: SAWS records an accrual for vacation payable for all full time employees and pays unused vacation hours available at the end of employment with the final paycheck. Changes in the liability amount for 2019 and 2018 were as follows:

	(amounts in thousands)				
	Balance at Beginning of Year	Current-Year Accruals	Payments	Balance at End of Year	Estimated Due Within One Year
Year Ended December 31, 2019	$ 9,813	$ 6,950	$ (5,890)	$ 10,873	$ 5,890
Year Ended December 31, 2018	$ 9,544	$ 5,954	$ (5,685)	$ 9,813	$ 5,685

Risk Management

Health Care Benefits: SAWS provides health care benefits to eligible employees and retirees through a self-insured plan that includes medical, prescription drug and dental benefits. The payment of claims associated with these benefits is handled by third party administrators. Plan participants contribute a portion of the cost of providing these benefits through payroll deductions or monthly premiums, annual deductibles and other co-payments. SAWS was self-insured for the first $350,000 of medical claims per person during 2018 and 2019.

Other Risks: SAWS is exposed to various risks of financial loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. SAWS is self-administered and self-insured for the first $2,000,000 of each workers compensation and general liability claim, and is fully self-insured for automobile liability. Claims that exceed the self-insured retention limit for workers' compensation and general liability are covered through SAWS' comprehensive commercial insurance program (CCIP). Additionally, under the CCIP, SAWS maintains deductible programs for public officials and employment practices liability, fiduciary liability, pollution legal liability, drone liability, cyber liability and crime with varying deductibles. Property coverage is on a replacement cost basis with a deductible of $250,000 per occurrence. Settled claims during the last three years have not exceeded the insurance coverage in any year.

The claims liability for health care benefits and other risks, including incurred but not reported claims, is based on the estimated ultimate cost of settling the claims. Changes in the liability amount for the last three fiscal years were as follows:

(amounts in thousands)

	Balance at Beginning of Year	Current-Year Accruals	Payments	Balance at End of Year	Estimated Due Within One Year
Year Ended December 31, 2019	$ 8,197	$ 22,398	$ (22,283)	$ 8,312	$ 8,312
Year Ended December 31, 2018	$ 7,187	$ 26,738	$ (25,728)	$ 8,197	$ 8,197
Year Ended December 31, 2017	$ 7,273	$ 22,586	$ (22,672)	$ 7,187	$ 7,187

NOTE G – DERIVATIVE INSTRUMENT

In 2003, SAWS entered into an interest rate swap agreement in connection with its City of San Antonio, Texas, Water System Subordinate Lien Revenue and Refunding Bonds, Series 2003-A and 2003-B (the "Series 2003 Bonds") issued in a variable interest rate mode. The Series 2003 Bonds were issued to provide funds for SAWS' capital improvements program and to refund certain outstanding commercial paper notes.

Objective of the Interest Rate Swap: The swap was used to hedge interest rates on the Series 2003 Bonds to a synthetic fixed rate that produced a lower interest rate cost than a traditional long term fixed rate bond issued at that time. In August 2008, SAWS used commercial paper notes to redeem $110,615,000 of the $111,615,000 outstanding principal of the Series 2003 Bonds due to unfavorable market conditions relating to the ratings downgrade of the 2003 Bond insurer, MBIA Insurance Corporation. In 2009, SAWS redeemed the remaining $1 million of the Series 2003 Bonds through the issuance of additional commercial paper. The interest rate swap agreement was not terminated upon the redemption of the 2003 Bonds and instead serves as an off-market hedge for that portion of the commercial paper notes outstanding which pertain to the redemption of the 2003 Bonds. SAWS currently intends to maintain a portion of its outstanding commercial paper in amounts matching the notional amounts of the swap.

SAWS did not recognize any economic gain or loss as a result of this refunding since the debt service requirements of the commercial paper notes are expected to closely match the debt service requirements of the refunded debt. Commercial paper notes totaling $77,115,000 at December 31, 2019 and $80,995,000 at December 31, 2018 were hedged by the interest rate swap agreement.

Terms: The swap agreement contains scheduled reductions to the outstanding notional amounts that are expected to follow the original scheduled reductions of the Series 2003 Bonds. The Series 2003 Bonds were issued on March 27, 2003, with a principal amount of $122,500,000. The swap agreement matures on May 1, 2033. At the time the swap was entered into, the counterparty was Bear Stearns Financial Products, Inc. ("Bear Stearns FPI"), with the index for the variable rate leg of the SWAP being the Securities Industry and Financial Markets Association ("SIFMA") Municipal Swap Index.

In 2008, JPMorgan Chase & Co. announced its acquisition of The Bear Stearns Companies Inc., the parent of Bear Stearns FPI. JPMorgan Chase guaranteed the trading obligations of Bear Stearns and its subsidiaries. Effective June 16, 2009, the swap agreement was amended between SAWS, JPMorgan Chase & Co, and MBIA to provide for JPMorgan Chase Bank N.A. to become the swap counterparty and allow for the remainder of outstanding Series 2003 Bonds to be redeemed, while maintaining the swap agreement as an obligation to all parties. The amendment provides for the conditional release of MBIA's swap insurance policy upon the occurrence of certain future events.

The combination of commercial paper notes and a floating-to-fixed swap creates a synthetic fixed-rate of 4.18%. The synthetic fixed-rate protects against the potential of rising interest rates.

Fair Value: The swap had a fair value of approximately negative $15,097,000 at December 31, 2019 and negative $12,516,000 at December 31, 2018. This value is based on Level 2 inputs in the fair value hierarchy using the zero-coupon valuation method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These net payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement on the swap.

The swap agreement meets the criteria of an effective hedge under GASB Statement No. 53 and therefore qualifies for hedge accounting treatment. Since the fair value is negative, the fair value is recorded as a non-current liability. Changes in the swap's fair value are recorded as a deferred outflow of resources and included on the Statement of Net Position. At the time the 2003 Bonds were redeemed in 2008, the fair value of the swap was negative $6.2 million. The deferred outflow at the time of redemption was included in the carrying value of the 2003 Bonds and resulted in a loss on redemption of $6.2 million. This loss is included in the deferred charge on bond refunding on the Statement of Net Position and is being amortized over the remaining life of the 2003 Bonds. The unamortized deferred charge on bond refunding related to the swap was $2,840,000 at December 31, 2019 and $3,184,000 at December 31, 2018.

Credit Risk: SAWS was not exposed to credit risk on its outstanding swap at December 31, 2018 and 2019 because the swap had a negative fair value. However, should interest rates change and the fair value of the swap become positive, SAWS would be exposed to credit risk in the amount of the swap's fair value. The swap counterparty, JPMorgan Chase Bank, N.A. was rated Aa2 by Moody's Investors Services, A+ by Standard and Poor's, and AA by Fitch Ratings as of December 31, 2019 and Aa2 by Moody's Investors Services, A+ by Standard and Poor's, and AA by Fitch Ratings as of December 31, 2018. The amended swap agreement contains a credit support annex which will become effective upon the release of MBIA from the swap insurance policy. Collateralization would be required by either party should the fair value of the swap reach applicable thresholds as stated in the amended swap agreement.

Basis Risk: SAWS is exposed to basis risk to the extent that the interest payments on its hedged commercial paper notes do not match the variable-rate payments received on the associated swap. SAWS attempts to mitigate this risk by (a) matching the outstanding hedged commercial paper notes associated with the redemption of the variable-rate debt to the notional amount and amortization schedule of the swap and (b) selecting an index for the variable-rate leg of the swap that is reasonably expected to closely match the interest rate on the hedged commercial paper notes.

Termination Risk: SAWS may terminate the Swap at any time for any reason. JPMorgan Chase may terminate the swap if SAWS fails to perform under the terms of the agreement. SAWS' ongoing payment obligations under the swap are insured as provided for in the swap amendment and JPMorgan Chase cannot terminate as long as the insurer does not fail to perform. Also, if at the time of the termination the swap has a negative fair value, SAWS would be liable to the counterparty for a payment equal to the swap's fair value.

Market-access Risk: SAWS is subject to market-access risk as the variable-rate debt hedged by the swap consists of commercial paper notes. At December 31, 2019, $77,115,000 of outstanding commercial paper with current maturities of approximately 33 days was hedged by the interest rate swap. At December 31, 2018, $80,995,000 of outstanding commercial paper with current maturities of approximately 30 days was hedged by the interest rate swap. As previously noted, SAWS intends to reissue the commercial paper notes in amounts matching the notional amounts of the swap.

Swap Payments and Associated Debt: As of December 31, 2019, debt service requirements of the hedged commercial paper notes and net swap payments, assuming current interest rates remain the same, are as detailed below. As rates vary, variable-rate interest payments and net swap payments will vary. Principal payments assume that commercial paper notes will be repaid in accordance with the amortization schedule of the swap.

Pay-Fixed, Receive-Variable Interest Rate Swap
Estimated Debt Service Requirements of Variable-Rate
Debt Outstanding and Net Swap Payments
(amounts in thousands)

Year	Principal	Interest Paid on Debt	Interest Rate Swap, Net	Total
2020	$ 4,055	$ 848	$ 1,912	$ 6,815
2021	4,240	801	1,805	6,846
2022	4,435	751	1,693	6,879
2023	4,640	699	1,575	6,914
2024	4,850	644	1,452	6,946
2025 - 2029	27,770	2,313	5,214	35,297
2030 - 2033	27,125	584	1,317	29,026
Total	$ 77,115	$ 6,640	$ 14,968	$ 98,723

NOTE H – LONG TERM DEBT

REVENUE BONDS

On January 29, 2019, SAWS issued $166,480,000 City of San Antonio, Texas Water System Variable Rate Junior Lien Revenue Bonds, Series 2019A (No Reserve Fund). The proceeds from the sale of the bonds were used to (i) finance capital improvement projects, and (ii) pay the cost of issuance. The bonds are multi-modal variable rate bonds, initially issued in a term mode through April 30, 2024 at an interest rate of 2.625% with a yield of 2.45%. The bonds are secured together with other outstanding Junior Lien Obligations solely by a lien on a pledge of net revenues and are subordinate to outstanding Senior Lien Obligations.

On June 25, 2019, SAWS deposited $178.9 million from available cash on hand in an irrevocable trust for the legal defeasance of $16,490,000 City of San Antonio, Texas Water System Revenue Bonds, Taxable Series 2009B (Direct Subsidy – Build America Bonds); $23,510,000 City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 2011A; $107,330.000 City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 2012; and $20,620,000 City of San Antonio Water System Revenue and Refunding Bonds, Series 2012A. The defeasance of these bonds reduced future debt service by approximately $213 million between 2020 and 2028. The cash flows required to service the defeasance of the debt are shown below.

Escrow Cash Flow
2019 Cash Defeasance
(amounts in thousands)

Date	Principal	Interest	Net Escrow Receipts
06/25/2019	$ 16,490	$ 93	$ 16,583
11/15/2019	-	3,641	3,641
05/15/2020	23,840	3,641	27,481
11/15/2020	-	3,060	3,060
05/15/2021	345	3,060	3,405
11/15/2021	-	3,051	3,051
05/15/2022	127,275	3,051	130,326
	$ 167,950	$ 19,597	$ 187,547

On September 25, 2019, SAWS issued $30,765,000 City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2019B through the Texas Water Development Board. The bonds were sold under the Drinking Water State Revolving Fund Program. The proceeds from the sale of the bonds were used to (i) finance capital improvement projects which qualify under the Texas Water Development Board Program, and (ii) pay the cost of issuance. The bonds are secured together with other outstanding Junior Lien Obligations solely by a lien on a pledge of net revenues and are subordinate to outstanding Senior Lien Obligations.

On October 23, 2019, SAWS issued $82,565,000 City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 2019C (No Reserve Fund). The proceeds from the sale of the bonds were used to (i) refund the City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2007, (ii) refund the City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2009, (iii) refund $64,660,000 in outstanding City of San Antonio, Texas Water System Taxable Bonds, Series 2010B (Direct Subsidy – Build America Bonds), and (iv) pay the cost of issuance. The refunding reduced total future debt service payments by approximately $28.4 million and resulted in an economic gain of $14.2 million. The bonds are secured together with other outstanding Junior Lien Obligations solely by a lien on a pledge of net revenues and are subordinate to outstanding Senior Lien Obligations.

Senior lien water system revenue bonds outstanding as of December 31, 2019 consist of the Series 2009B, Series 2010B, Series 2011, Series 2011A, Series 2012, and Series 2012A, outstanding in the amount of $466,260,000 and as of December 31, 2018, consist of the Series 2009B, Series 2010B, Series 2011, Series 2011A, Series 2012, and Series 2012A, in the amount of $718,305,000. Senior lien revenue bonds are collateralized by a senior lien and pledge of the gross revenues of SAWS after deducting and paying the current expenses of operation and maintenance of SAWS and maintaining a two-month operating reserve for such expenses. Interest rates on senior lien bonds range from 3.00% to 5.92%, exclusive of any federal interest subsidy on the Series 2009B and 2010B Build America Bonds.

The junior lien water system revenue bonds are composed of two categories of debt: fixed rate debt and variable rate debt. The junior lien fixed rate debt is similar to the senior lien bonds, as they have fixed interest rates for the life of the bonds. The junior lien variable rate bonds have interest rates that are periodically reset throughout the life of the bonds. An additional component of the fixed rate junior lien debt is direct placement debt with the Texas Water Development Board (TWDB). Direct placement debt with TWDB is offered at subsidized interest rates for qualified water, wastewater and water supply projects. All the junior lien water system revenue bonds are collateralized by a junior lien and pledge of the gross revenues of SAWS after deducting the current expenses of operation and maintenance of SAWS, maintaining a two-month operating reserve for such expenses, and paying debt service on senior lien debt.

As of December 31, 2019, direct placement bonds with TWDB consist of Series 2009A, Series 2010A, Series 2011, Series 2011A, Series 2012, Series 2013A, Series 2013C, Series 2013D, Series 2014C, Series 2014D, Series 2015A, Series 2016D, Series 2016E, Series 2018B, and Series 2019B in an outstanding amount of $373,435,000. Interest rates on the junior lien fixed rate bonds range from 0.000% to 3.900%

As of December 31, 2019, the remaining junior lien fixed rate revenue bonds consist of Series 2012 (No Reserve Fund), Series 2013B (No Reserve Fund), Series 2013E (No Reserve Fund), Series 2014A (No Reserve Fund), Series 2015B (No Reserve Fund), Series 2016A (No Reserve Fund), Taxable Series 2016B, Series 2016C (No Reserve Fund), Series 2017A (No Reserve Fund), Series 2018A (No Reserve Fund), and Series 2019C (No Reserve Fund) is outstanding in the amount of $1,341,960,000. Interest rates on the junior lien fixed rate bonds range from 2.500% to 5.000%

As of December 31, 2018, direct placement bonds with the TWDB consisting of Series 2007, Series 2009, Series 2009A, Series 2010A, Series 2011, Series 2011A, Series 2012, Series 2013A, Series 2013C, Series 2013D, Series 2014C, Series 2014D, Series 2015A, Series 2016D, Series 2016E, Series 2018B are outstanding in the amount of $404,930,000. Interest rates on the junior lien fixed rate bonds range from 0.000% to 4.350%

As of December 31, 2018, the remaining junior lien fixed rate revenue bonds consisting of Series 2010, Series 2012 (No Reserve Fund), Series 2013B (No Reserve Fund), Series 2013E (No Reserve Fund), Series 2014A (No Reserve Fund), Series 2015B (No Reserve Fund), Series 2016A (No Reserve Fund), Taxable Series 2016B, Series 2016C (No Reserve Fund), Series 2017A (No Reserve Fund), and Series 2018A (No Reserve Fund), are outstanding in the amount of $1,309,595,000. Interest rates on the junior lien fixed rate bonds range from 2.500% to 5.000%.

The junior lien variable rate bonds, comprised of the Series 2013F (No Reserve Fund) (the Series 2013F Bonds), the Series 2014B (No Reserve Fund) (the Series 2014B Bonds) and the Series 2019A (No Reserve Fund) (the Series

2019A Bonds), are outstanding in the amount of $364,865,000 at December 31, 2019. The junior lien variable rate bonds, comprised of the Series 2013F Bonds and the Series 2014B Bonds are outstanding in the amount of $198,385,000 at December 31, 2018. The Series 2013F Bonds are tax-exempt variable rate notes initially issued in a Securities Industry and Financial Markets Association (SIFMA) Index Mode, with the interest rate reset weekly, through the initial interest period which expired October 31, 2016. On November 1, 2016, SAWS remarketed $98,795,000 in Series 2013F Bonds into a five-year fixed term mode that ends October 31, 2021, the new interest period. During the new interest period, the Series 2013F Bonds bear interest at 2.00% with a yield of 1.63%. The Series 2014B Bonds are tax-exempt variable rate notes initially issued in a SIFMA Index Mode, with the interest rate reset weekly, through the initial interest period expiring October 31, 2017. On November 1, 2017, SAWS remarketed $99,590,000 in Series 2014B Bonds into a five-year fixed term mode that ends October 31, 2022, the new interest period. During the new interest period, the Series 2014B Bonds bear interest at 2.00% with a yield of 1.80%. The Series 2019A Bonds are tax-exempt variable rate notes initially issued in the term mode through April 30, 2024, the initial interest period, at an interest rate of 2.625% with a yield of 2.45%.

Upon conclusion of the initial interest period, or any subsequent new interest period, SAWS is permitted to change the mode for all or any portion of the junior lien variable interest bonds (the Bonds) to a different mode or to a SIFMA Index Mode of a different duration. The Bonds are subject to a mandatory tender without right of retention at the conclusion of the initial interest period or any subsequent new interest period. During the initial interest period and any subsequent new interest period the Bonds are not subject to the benefit of a liquidity facility provided by a third party. Accordingly, a failure to remarket the Bonds at the end of the initial interest period or subsequent new interest period will result in the rescission of the notice of mandatory tender with respect to the Bonds and SAWS has no obligation to purchase the Bonds at such time. The occurrence of a failed remarketing will not result in an event of default under the ordinance. Until SAWS redeems or remarkets the Bonds that had a failed remarketing, the Bonds shall bear interest at the stepped rate of 8.0% for the Series 2013F Bonds, 7.0% for the Series 2014B Bonds, and 8.0% for the Series 2019A Bonds.

The Federal Tax Reform Act of 1986 requires issuers of tax-exempt debt to make payments to the United States Treasury for investment income received at yields that exceed the issuer's tax exempt borrowing rates. The Treasury requires payment for each issue every five years. The estimated liability is updated annually for all tax-exempt issuances or changes in yields until such time payment of the calculated liability is due. A liability is recorded once payment appears to be probable. As of December 31, 2019 and December 31, 2018, SAWS has no arbitrage rebate liability associated with any outstanding bonds.

The following tables summarize revenue bond transactions for the years ended December 31, 2019 and 2018.

(amounts in thousands)	Balance January 1, 2019	Additions	Reductions/ Amortization	Balance December 31, 2019	Due Within One Year
Revenue Bonds	$ 2,226,285	$ 249,045	$ 302,245	$ 2,173,085	$ 69,730
Direct Placement Bonds	404,930	30,765	62,260	373,435	16,715
Unamortized premium	204,171	29,228	44,070	189,329	
Unamortized discount	(816)	-	(42)	(774)	
Total Bonds Payable, Net	$ 2,834,570	$ 309,038	$ 408,533	$ 2,735,075	$ 86,445

(amounts in thousands)	Balance January 1, 2018	Additions	Reductions/ Amortization	Balance December 31, 2018	Due Within One Year
Revenue Bonds	$ 2,083,970	$ 208,825	$ 66,510	$ 2,226,285	$ 69,635
Direct Placement Bonds	453,550	10,500	59,120	404,930	17,425
Unamortized premium	199,640	29,186	24,655	204,171	
Unamortized discount	(1,421)	-	(605)	(816)	
Total Bonds Payable, Net	$ 2,735,739	$ 248,511	$ 149,680	$ 2,834,570	$ 87,060

The following table shows the annual debt service requirements on SAWS' debt obligations for each of the next five years and then in five year increments after that.

Annual Debt Service Requirements
Revenue and Refunding Bonds
(amounts in thousands)

Year Ended December 31,	Fixed Rate Bonds						Variable Rate Bonds	
	Revenue Bonds				Direct Placement Bonds		Revenue Bonds	
	Principal	Interest	Interest Rate Subsidy‡	Net Interest	Principal	Interest	Principal	Interest*
2020	$ 69,730	$ 86,309	$ 1,916	$ 84,393	$ 16,715	$ 6,522	$ -	$ 8,338
2021	72,680	82,592	1,904	80,688	16,865	6,374	-	8,338
2022	63,905	79,198	1,904	77,294	17,030	6,203	-	9,326
2023	61,055	76,075	1,904	74,171	17,235	5,999	-	10,322
2024	65,495	72,914	1,904	71,010	17,460	5,774	-	10,634
2025 - 2029	353,550	312,728	8,595	304,133	91,575	24,579	11,015	54,403
2030 - 2034	405,915	224,608	6,634	217,974	76,260	16,607	86,955	47,005
2035 - 2039	466,830	114,658	3,096	111,562	56,140	9,865	106,035	32,264
2040 - 2044	181,635	32,186	53	32,133	51,680	3,377	112,865	15,307
2045 - 2049	67,425	5,697	-	5,697	12,475	229	47,995	3,686
	$ 1,808,220	$ 1,086,965	$ 27,910	$ 1,059,055	$ 373,435	$ 85,529	$ 364,865	$ 199,623

‡ Federal interest rate subsidy on Build America Bonds is utilized to pay interest on those bonds but is reported as nonoperating revenue. The federal budget approved by the U.S. Congress for the fiscal year ending September 30, 2020, reduced the BAB subsidy paid during the fiscal year by 5.9%. The BAB subsidy to be received by SAWS is reduced by this amount for all future payments.

*The variable rate bonds are currently in a fixed rate Term Mode through October 31, 2021, October 31, 2022, and April 30, 2024. Interest listed above is based on a 2.00% or 2.625% fixed rate through the new or initial interst period, and a budgeted rate of 3.00% thereafter.

COMMERCIAL PAPER PROGRAM

SAWS maintains a commercial paper program that is used to provide funds for the interim financing of a portion of its capital improvements. The City Council of the City of San Antonio has authorized the commercial paper program in an amount of $500 million. Notes payable under the program cannot exceed maturities of 270 days.

The City has covenanted in the Ordinance authorizing the commercial paper program (the "Note Ordinance") the issuance of "City of San Antonio, Texas Water System Commercial Paper Notes, Series A" (the "Series A Notes"), the issuance of "City of San Antonio, Texas Water System Commercial Paper Notes, Series B" (the "Series B Notes"), and the maintenance at all times of credit facilities with banks or other financial institutions which would provide available borrowing capacity sufficient to pay the principal of the commercial paper program. The credit facility is maintained under the terms of a revolving credit agreement. The Ordinance also authorizes the ability to designate and issue subseries of notes. The Series A Notes are currently authorized as "City of San Antonio, Texas Water System Commercial Paper Notes, Subseries A-1" (the "Subseries A-1 Notes") and "City of San Antonio, Texas Water System Commercial Paper Notes, Subseries A-2" (the "Subseries A-2 Notes"). The Subseries A-2 Notes are directly placed with JPMorgan Chase Bank, N.A. under a Note Purchase Agreement.

The borrowings under the commercial paper program are equally and ratably secured by and are payable from (i) the proceeds from the sale of bonds or additional borrowing under the commercial paper program and (ii) borrowing under and pursuant to the revolving credit agreement. The capacity of the combined revolving credit and note purchase agreements is $500 million with the Revolving Credit Agreement with JPMorgan Chase Bank, N.A. in the amount of $400 million, supporting the Series A Notes expiring October 4, 2023; and the Revolving Credit Agreement with Wells Fargo Bank, N.A. in the amount of $100 million, supporting the Series B Notes expiring January 15, 2021.

The issuance of commercial paper is further supported by the following agreements and related participants:

- Dealer Agreements with Goldman, Sachs & Co., J.P. Morgan Securities LLC., and Ramirez & Co., Inc.
- Issuing and Paying Agency Agreement with The Bank of New York Mellon Trust Company, N.A.

Commercial paper notes of $281,815,000 are outstanding as of December 31, 2019, with $202,700,000 outstanding under the Subseries A-1 Notes, $2,000,000 outstanding under Subseries A-2 Notes, and $77,115,000 outstanding under Series B Notes. Interest rates on the Subseries A-1 Notes and the Series B Notes outstanding at December 31, 2019 range from 1.13% to 1.46% and maturities range from 29 to 180 days. The interest rate on the Subseries A-2 Notes outstanding at December 31, 2019 is 2.636% with a maturity of 31 days. All outstanding notes had an average rate of 1.427% and averaged 101 days to maturity. Commercial paper notes of $215,695,000 are outstanding as of December 31, 2018, with $132,700,000 outstanding under the Subseries A-1 Notes, $2,000,000 outstanding under Subseries A-2 Notes, and $80,995,000 outstanding under Series B Notes. Interest rates on the Subseries A-1 Notes and the Series B Notes outstanding at December 31, 2018 range from 1.75% to 1.95% and maturities range from 30 to 180 days. The interest rate on the Subseries A-2 Notes outstanding at December 31, 2018 is 3.16% with a maturity of 30 days. All outstanding notes had an average rate of 1.82% and averaged 71 days to maturity.

The following tables summarize the outstanding and available balance of the commercial paper program for the years ended December 31, 2019 and December 31, 2018.

Year Ended December 31, 2019
(amounts in thousands)

Issue Description	Authorized Amount	Amount Outstanding	Unissued Portion
Subseries A-1 Notes	$ 398,000	$ 202,700	$ 195,300
Subseries A-2 Notes	2,000	2,000	-
Series B Notes	100,000	77,115	22,885
Total	$ 500,000	$ 281,815	$ 218,185

Year Ended December 31, 2018
(amounts in thousands)

Issue Description	Authorized Amount	Amount Outstanding	Unissued Portion
Subseries A-1 Notes	$ 398,000	$ 132,700	$ 265,300
Subseries A-2 Notes	2,000	2,000	-
Series B Notes	100,000	80,995	19,005
Total	$ 500,000	$ 215,695	$ 284,305

SAWS intends to reissue maturing commercial paper, in accordance with the refinancing terms of the revolving credit agreement, and ultimately refund such maturities with proceeds from the issuance of long-term revenue bonds. Consistent with this intent, and since SAWS has the available $500 million revolving credit agreement described above, SAWS has classified nearly all outstanding commercial paper notes as long-term debt. In accordance with the amortization schedule of the interest rate swap agreement discussed in Note G, SAWS intends to redeem $4,055,000 of commercial paper in 2020. Therefore, this portion of the commercial paper is classified as a current liability.

The following tables summarize transactions of the commercial paper program for the years ended December 31, 2019 and 2018.

Year Ended December 31, 2019 (amounts in thousands) Issue Description	Outstanding Notes at Beginning of Year	Notes Issued	Notes Retired	Outstanding Notes at End of Year	Payable Within One Year
Subseries A-1 Notes	$ 132,700	$ 70,000	$ -	$ 202,700	$ 4,055
Subseries A-2 Notes (Direct Placement)	2,000	-	-	2,000	-
Series B Notes	80,995	-	3,880	77,115	-
Total	$ 215,695	$ 70,000	$ 3,880	$ 281,815	$ 4,055

Year Ended December 31, 2018 (amounts in thousands) Issue Description	Outstanding Notes at Beginning of Year	Notes Issued	Notes Retired	Outstanding Notes at End of Year	Payable Within One Year
Subseries A-1 Notes	$ 193,355	$ 65,000	$ 125,655	$ 132,700	$ 3,880
Subseries A-2 Notes (Direct Placement)	-	2,000	-	2,000	-
Series B Notes	84,705	-	3,710	80,995	-
Total	$ 278,060	$ 67,000	$ 129,365	$ 215,695	$ 3,880

OTHER DEBT MATTERS

Debt Covenants: SAWS is required to comply with various provisions included in the ordinances which authorized the bond issuances. SAWS management believes it is in compliance with all significant provisions of the bond ordinances.

Under these bond ordinances, SAWS is required to establish and maintain rates and charges for services sufficient to produce Net Revenues sufficient to pay 1.25 times the annual debt service requirements on Senior Lien debt obligations (senior lien debt coverage ratio). SAWS senior lien debt coverage ratio was 8.66 at December 31, 2019 and 6.57 at December 31, 2018.

NOTE I - CONTINGENCIES AND COMMITMENTS

Water Agreements

As of December 31, 2019, SAWS has entered into various water leases to obtain rights to pump water from the Edwards Aquifer. The term of these agreements vary, with some expiring as early as 2020 and others continuing until 2028. Some of the leases include price escalations and the annual cost per acre foot ranges from $100 to $140. Under these various leases, SAWS paid $3.8 million in 2019 and $4.4 million 2018.

The future commitments under these leases are as follows:

(dollars in thousands)	2020	2021	2022	2023	2024	Thereafter
Edwards Aquifer - lease payments	$ 3,403	$ 3,207	$ 2,635	$ 1,098	$ 46	$ 139
Edwards Aquifer - acre feet leased	24,741	23,261	19,161	8,536	356	1,069

SAWS also has commitments to purchase water supplies under various contracts. All water provided under these contracts is subject to availability.

Under a contract with Guadalupe-Blanco River Authority (GBRA), SAWS will receive 4,000 acre feet of water annually through the end of the contract in 2037. Additionally, SAWS must purchase water not sold by GBRA to other third parties. The additional amount of water available in 2020 is estimated to be 2,900 acre feet and is projected to decline over the remaining term of the contract as the demand increases for other GBRA customers. The cost of the water escalates over time with projected prices ranging from $1,140 per acre foot in 2020 to approximately $1,883 per acre foot by 2037. SAWS has an option to extend this contract until 2077 under new payment terms.

Under a contract with the Massah Development Corporation, SAWS has a minimum take or pay commitment to purchase 100 acre-feet per month or 1,200 acre-feet per year of raw water from the Lower Glen Rose/Cow Creek formations of the Trinity Aquifer in northern Bexar County at projected prices ranging from $654 to $758 per acre foot. This agreement expires in 2025 and SAWS has a unilateral option to extend the contract for 10 years.

Under a contract with Sneckner Partners, Ltd., SAWS has a take or pay commitment to purchase 1,500 acre-feet of water annually from the Trinity Aquifer at a minimum annual cost of $225 per acre-foot through February 2020. SAWS has a unilateral option to extend the contract through 2026. At December 31, 2019, SAWS does not intend to exercise this option. As part of this contract, SAWS agreed to make quarterly defined payments for any residential customers connected to the system within a defined geographical area that began taking water service from SAWS. SAWS began making these payments during 2012 as the area began to develop. SAWS has made payments totaling $359,000 for new customer connections under the terms of this contract.

In 2012, SAWS entered into an agreement with Water Exploration Company, Ltd., (WECO) to purchase groundwater produced by WECO from the Trinity Aquifer. In connection with this agreement, two prior water purchase agreements between DSP and WECO were terminated. In 2018, Texas Water Supply Company assumed the assets of WECO, including this agreement between SAWS and WECO. The 2012 agreement has a term of 15 years, with two optional 5 year extensions. SAWS is obligated to purchase up to 17,000 acre-feet per year in monthly increments not to exceed 1,417 acre-feet if water is available to be produced. SAWS only pays for delivered water meeting all state and federal drinking water standards. Pumping under this contract may not reduce the Trinity Aquifer below 600 feet Mean Sea Level at test wells on the tracts. The projected price to be paid per acre-foot of raw water ranges from $1,009 in 2020 to $1,159 by 2027.

In 2010, SAWS was granted a permit by the Gonzales County Underground Water Conservation District ("District") to produce 11,688 acre feet of water from the Carrizo Aquifer in Gonzales County. SAWS has entered into 23 separate agreements with land owners to produce water under that permit. These agreements remain in force indefinitely as long as SAWS continues to make payments in accordance with the terms of the agreements. SAWS makes payments to the landowners based on actual water produced. SAWS expects to produce the maximum water available under its permit in 2020 and projects payments to landowners will be $1,256,000. These payments escalate annually based on the average of the increase in the Consumer Price Index and Producers Price Index.

In 2011, SAWS entered into an agreement with the Schertz Seguin Local Government Corporation (SSLGC) to 1) treat water produced by SAWS under its permit with the District at SSLGC's treatment plant in Gonzales County and transport that water through SSLGC's existing transportation pipeline to a SAWS facility in Schertz, Texas and 2) purchase up to 5,000 acre feet of wholesale water annually from SSLGC. As part of this agreement, SSLGC agreed to expand its treatment facilities to handle the volume of water supplied by SAWS. SSLGC issued contract revenue bonds in 2012 to finance the expansion. SAWS is unconditionally obligated to make monthly payments to SSLGC beginning in December 2014 equal to 1/12th the annual debt service payment owed by SSLGC on the contract revenue bonds regardless of the amount of water actually provided by SAWS to SSLGC for treatment and transportation. In addition to the payment made to SSLGC for the expansion of the treatment plant, SAWS makes payments to SSLGC for treating and transporting the SAWS produced water.

The initial term of the agreement with SSLGC expires in 2050 and is automatically renewed for successive terms of 5 years unless SAWS chooses to cancel the contract upon the expiration of any term. The projected price paid to SSLGC to treat and transport water provided by SAWS is projected to be $504 per acre foot in 2020 and ranging from $531 to $636 per acre foot from 2021 through 2050. This projected price includes the debt service associated with the expansion of SSLGC's treatment plant. Payments for any wholesale water purchased from SSLGC are based on SSLGC's operating water rates. The 2020 price also includes the cost of surplus water from SSLGC, which contractually continues to be made available in subsequent years.

Under a contract with Bexar-Medina-Atascosa Counties W.C.I.D. No. 1 (BMA), SAWS has a take or pay commitment to purchase 19,974 acre feet of untreated water annually from Medina Lake. If BMA is unable to deliver water to SAWS, BMA issues a credit for the undelivered water which can be used to offset payments due to BMA during the next calendar year. The price of the water is based on the rate charged by Guadalupe-Blanco River Authority (GBRA) for raw water. GBRA's rate for raw water at December 31, 2019 was $151 per acre foot. The agreement has been amended several times with the current agreement ending in 2049.

Under a contract with Canyon Regional Water Authority (CRWA), SAWS is required to make certain contractually required minimum payments each year to fund capital and operating expenses of CRWA. Additionally, SAWS makes payments based on the number of acre feet of water SAWS commits to take in a given year. SAWS currently has access to 6,300 acre feet through 2023 and 6,800 acre feet annually from 2024 through 2042. For 2020, SAWS has committed to taking 5,300 acre feet with a projected cost of $1,397 per acre foot.

Total payments under these water purchase agreements were $42.0 million in 2019 and $33.5 million in 2018. A summary of all estimated future payments under all of these agreements is provided in the following table. The estimated fixed water payments consist of the take or pay commitments under the agreements. The estimated variable water payments will be made only if water is made available to SAWS. The estimates assume price escalations but do not assume the extension of any water purchase agreement. As with any estimate, the actual amounts paid could differ materially.

(dollars in thousands)	2020	2021	2022	2023	2024	Thereafter
Purchased water payments - fixed	$ 22,274	$ 22,553	$ 22,948	$ 23,348	$ 23,588	$ 537,731
Acre feet purchased - fixed	43,007	42,507	42,507	42,507	43,007	961,220
Purchased water payments - variable	$ 14,638	$ 14,829	$ 15,025	$ 15,229	$ 15,444	$ 74,370
Acre feet purchased - variable	14,062	13,924	13,789	13,656	13,526	44,886

In October 2014, the City Council adopted an ordinance, approving the execution of a Water Transmission and Purchase Agreement (the "Agreement") between the City, acting by and through SAWS, and Vista Ridge LLC, pursuant to which Vista Ridge LLC has committed to make available to SAWS, and SAWS has agreed to pay for, up to 50,000 acre-feet of potable water ("Project Water") per year for an initial period of 30 years plus a limited (20 year) extension period under certain circumstances (hereinafter referred to as the "operational" phase). To produce and deliver the Project Water, Vista Ridge LLC has developed well fields to withdraw water from the Carrizo and Simsboro aquifers in Burleson County, Texas pursuant to currently-held long-term leases with landowners and constructed a 142-mile pipeline from this well field to northern Bexar County (the well fields and the pipeline, together, the "Project"). The pipeline has been connected to the SAWS distribution system at a delivery point in northern Bexar County (the "Connection Point"). The execution of the Agreement represents a significant diversification of the City's water source, as SAWS projects that Project Water, if delivered at the maximum amount, will account for approximately 20% of the System's current annual usage.

At the end of the operational phase, ownership of the Project will be transferred to SAWS at no cost. SAWS has also entered into a separate agreement with Blue Water Vista Ridge, LLC, the lessee of the Project Water, to continue to acquire the 50,000 acre-feet of untreated groundwater, for an additional 30 year period upon the termination of the Agreement and transfer of the Project to SAWS. The cost of such water at the end of the Agreement will be tied to prevailing Edwards Aquifer leases.

The Project achieved financial close in November 2016 and is nearing completion of the construction phase. During this phase, SAWS must construct any improvements necessary to accept and integrate the Project Water. The anticipated capital cost of SAWS improvements is currently projected to be approximately $220 million. The construction phase has an estimated completion date of April 15, 2020, at which time the aforementioned 30-year operational phase commences. During the operational phase, SAWS is obligated to pay for water (up to 50,000 acre-feet annually) made available to it by Vista Ridge LLC at the Connection Point.

A portion of the SAWS improvements necessary to integrate the full quantity of water expected to be made available has experienced construction challenges and will not be complete by the anticipated April 2020 commercial operation date. All required improvements are currently estimated to be completed by summer of 2020. During the several month period in which SAWS anticipates being able to take and integrate roughly half of the water made available to it, SAWS anticipates building up credits for water that has been paid for but not yet received. Under the terms of the Agreement, SAWS will receive the benefits of these credits in future years.

Pursuant to the terms of the Agreement, SAWS will pay costs arising under the Agreement, as a maintenance and operating expense of the System from a flow of funds perspective (see Note B), only for Project Water made available at the Connection Point (which payment will also include the costs of operating and maintaining the Project as described below). SAWS will have no obligation to pay for any debt issued by Vista Ridge LLC, and any such debt will be non-recourse to SAWS.

On May 17, 2016, SAWS exercised its contractual right to fix the Capital and Raw Groundwater Unit Price under the Agreement based on the methodology provided for therein. This action served to lock in the price of the Project Water component of SAWS annual payment requirement at $1,606 per acre foot for the entire 30 year term (and any extension of that term) of the Agreement.

In addition to the Capital and Raw Groundwater Unit Price, SAWS will pay operations and maintenance costs deemed to be compensable by an independent budget panel as a direct pass through under the Agreement as well as electricity cost. Finally, SAWS is responsible for compensating the Project Company for any major repairs and replacement costs, which may arise and are deemed to be compensable by the budget panel. It is estimated that the water (including O&M and electricity) will initially cost approximately $2,100 per acre foot, resulting in an estimated initial annual cost of approximately $105 million for 50,000 acre feet of delivered water. Delivery of water from the Project is expected to begin in April 2020. In 2015, the City Council approved a series of increases to the water supply fee through 2020 to support the acquisition of new water supplies, including water supplied from the Project.

Because all Project assets will transfer to SAWS at the end of the contract, once the operational phase begins, SAWS anticipates recording capital assets and a contract liability equal to the acquisition value of the Project Company infrastructure. Management currently estimates the initial recorded value for the capital assets and contract liability to be approximately $930 million.

SAWS has the right to terminate the Agreement at any time by purchasing the Project for the aggregate amount of the outstanding Project Company debt, contract breakage costs and return of and return on equity contributions by Vista Ridge's principals. SAWS also has the obligation to purchase the Project assets in similar fashion in the event of a SAWS default under the Agreement. The termination payment as of December 31, 2019 was estimated to be approximately $1 billion.

Other Contingencies and Commitments

SAWS is also committed under various contracts for completion of construction or acquisition of utility plant totaling approximately $403.3 million as of December 31, 2019. Funding of this amount will come from excess revenues, contributions from developers, restricted assets, debt issuances and available commercial paper capacity.

In March 2007, SAWS was orally notified by Region 6 of the United States Environmental Protection Agency (EPA) of alleged failures to comply with the Clean Water Act due to the occurrence of sanitary sewer overflows (SSOs). The EPA subsequently referred the matter to the United States Department of Justice (DOJ) for enforcement action. SAWS engaged in settlement negotiations with the EPA and the DOJ to resolve the allegations. In June 2013, the Board approved a Consent Decree between SAWS and the United States of America and the State of Texas to resolve this enforcement action. During the 10 to 12 year term of the Consent Decree, SAWS estimated the cost to perform the operating and maintenance requirements of the Consent Decree to be approximately $250 million. SAWS estimates that capital expenditures associated with the requirements of the Consent Decree could range from $1.2 billion to $1.3 billion. As with any estimate, the actual amounts incurred could differ materially.

Through December 31, 2019, capital expenditures related to the Consent Decree totaled approximately $578 million, which includes certain work which was previously planned prior to entry into the Consent Decree. Since entry into the Consent Decree, SAWS has performed its obligations under the terms of the Consent Decree and management believes SAWS is in material compliance with such terms, conditions and requirements. Since 2010, SAWS has seen a significant reduction in SSOs, from 538 in 2010 to 163 in 2019.

SAWS operates the Mitchell Lake Site Wastewater Treatment Facility (Mitchell Lake) pursuant to a Texas Pollutant Discharge Elimination Permit (Permit) issued by the Texas Commission on Environmental Quality under a delegation of authority from the EPA. In October 2015, the EPA notified SAWS that SAWS violated the effluent discharge limitations provided in that Permit as a result of discharges occurring during significant rainfall events.

On August 18, 2016, SAWS received an Administrative Order from the EPA that alleged SAWS violated the Permit by failing to meet effluent limits as required by the Permit. Mitchell Lake is not a standard brick and mortar wastewater treatment facility. Instead, Mitchell Lake is a unique and environmentally sensitive natural facility that has become a wildlife refuge and an active destination attraction within the City. The Mitchell Lake surface area covers approximately 600 acres and provides an essential habitat where migrating birds can rest and feed. Discharges from Mitchell Lake only occur after significant rainfall events. The intermittent nature of the discharges after rainfall makes traditional treatment options impractical.

Upon receiving the Administrative Order, SAWS began working with consulting experts and conducted preliminary feasibility evaluations of a potential solution that has two major components: (a) modifications to the existing dam with the construction of a new spillway and (b) constructing treatment wetlands of approximately 125 acres below Mitchell Lake.

By letter dated February 28, 2019, the EPA delivered a second Administrative Order to SAWS that includes a Schedule of Activities, which requires completion of the wetlands project by September 30, 2024. To inform the design and operation of a full-scale constructed wetlands, SAWS commenced a pilot wetlands study in 2019 of approximately 1.3 acres. Operations began in the summer of 2019 and after a one-year operation period, a final report will be produced by December of 2020. On January 9, 2018, SAWS purchased a 283-acre tract of land that is anticipated to be used to implement the downstream wetlands project. Negotiations are ongoing for the acquisition of an additional 234-acre tract that will be necessary for the implementation of the downstream wetlands project. At this time, projected costs for the constructed wetlands project are estimated to be $67.5 million. No monetary penalties have been assessed, although the EPA reserves all rights to seek any appropriate remedies. It is premature to estimate the final cost of the project that SAWS will implement to construct downstream wetlands and modified dam structures, or the ultimate success of the pilot project.

In addition, SAWS has partnered with the U.S. Army Corps of Engineers (USACE) on an Aquatic Ecosystem Restoration Feasibility Study for Mitchell Lake. The three-year study will include an investigation into the methods of restoring lost and/or degraded ecological functions in several areas adjacent to Mitchell Lake. The total cost of the study is $3 million, with SAWS and USACE each bearing one-half of the total costs.

NOTE J - PENSION AND RETIREMENT PLANS

SAWS' pension program includes benefits provided by the Texas Municipal Retirement System (TMRS), the San Antonio Water System Retirement Plan (SAWSRP) and the District Special Project Retirement Income Plan (DSPRP).

Texas Municipal Retirement System

SAWS participates as one of 887 plans in the nontraditional, joint contributory, hybrid defined benefit pension plan administered by the Texas Municipal Retirement System (TMRS). TMRS is an agency created by the State of Texas and administered in accordance with the TMRS Act, Subtitle G, Title 8, Texas Government Code (the TMRS Act) as an agent multiple-employer retirement system for municipal employees in the State of Texas. The TMRS Act places the general administration and management of the System with a six-member Board of Trustees. Although the Governor, with the advice and consent of the Senate, appoints the TMRS Board, TMRS is not fiscally dependent on the State of Texas. TMRS's defined benefit pension plan is a tax-qualified plan under Section 401 (a) of the Internal Revenue Code. TMRS issues a publicly available comprehensive annual financial report that can be obtained at www.tmrs.com

TMRS provides retirement benefits to eligible SAWS employees. At retirement, the benefit is calculated as if the sum of the employee's contribution, with interest, and the SAWS financed monetary credits with interest were used to purchase an annuity. Members choose to receive their benefit in one of seven payment options. Members may also choose to receive a portion of their benefit as a partial lump sum distribution in an amount equal to 12, 24 or 36 monthly payments, which cannot exceed 75% of the member's deposits and interest.

The plan provisions that have been adopted by SAWS are within the options available in the governing state statutes of TMRS. Plan provisions for SAWS for the 2019 and 2018 plan years were as follows:

Years required for vesting	5
Service retirement eligibility (expressed as age/years of service)	60/5, any/20
Updated Service Credit	100% Repeating
Annuity increase (to retirees)	70% of CPI Repeating

Total number of SAWS participants in TMRS as of the last two actuarial valuation dates is summarized below:

	December 31,	
	2018	2017
Active employees	1,709	1,698
Retirees and beneficiaries currently receiving benefits	1,269	1,223
Inactive members	701	653
Total	3,679	3,574

Under the state law governing TMRS, SAWS' contribution rate is determined annually by the actuary using the Entry Age Normal (EAN) cost method. The actuarially determined rate is the estimated amount necessary to finance the cost of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Eligible SAWS employees are required to contribute 3% of their annual gross earnings. The employer required contribution rates for SAWS were 3.60% and 3.70% in calendar years 2018 and 2017, respectively. SAWS' contributions to TMRS totaled $4,100,000 and $4,059,000 for the years ended December 31, 2018 and 2017, respectively. These contributions equaled the required contributions.

SAWS Net Pension Liability for the TMRS plan as of December 31, 2019 and 2018 was measured as of December 31, 2018 and 2017, respectively. The Total Pension Liability used to calculate the Net Pension Liability was determined by an actuarial valuation performed as of the measurement date.

The December 31, 2018 and 2017 valuations included the following actuarial assumptions:

Annual inflation	2.50%
Overall payroll growth	3.00%
Investment rate of return	6.75%, net of pension plan investment expense, including inflation

Salary increases were based on a service-related table. Mortality rates for active members, retirees, and beneficiaries were based on the Gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment, with male rates multiplied by 109% and female rates multiplied by 103%. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements. For disabled annuitants, the Gender-distinct RP2000 Combined Healthy Mortality Tables with Blue Collar Adjustment are used with males rates multiplied by 109% and female rates multiplied by 103% with a 3-year set-forward for both males and females. In addition, a 3% minimum mortality rate is applied to reflect the impairment for younger members who become disabled. The rates are projected on a fully generational basis by scale BB to account for future mortality improvements subject to the 3% floor.

The actuarial assumptions were developed primarily from the actuarial investigation of the experience of TMRS over the four year period from December 31, 2010 to December 31, 2014. They were adopted in 2015 and first used in the December 31, 2015 actuarial valuation. The post-retirement mortality assumption for healthy annuitants and Annuity Purchase Rate (APRs) are based on the Mortality Experience Investigation Study covering 2009 through 2011 and dated December 31, 2013. In conjunction with these changes first used in the December 31, 2013 valuation, SAWS adopted the Entry Age Normal actuarial cost method and a one-time change to the amortization policy.

Plan assets are managed on a total return basis with an emphasis on both capital appreciation as well as the production of income in order to satisfy the short-term and long-term funding needs of TMRS. The long-term expected rate of return on pension plan investments was determined using a building-block method in which best estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

In determining their best estimate of a recommended investment return assumption under the various alternative asset allocation portfolios, TMRS' consulting actuary, Gabriel Roeder Smith Retirement Consulting, focused on the area between (1) arithmetic mean (aggressive) without an adjustment for time (conservative) and (2) the geometric mean (conservative) with an adjustment for time (aggressive).

Fiscal years 2019 and 2018 had the following target allocations and best estimates of real rates of return for each major asset class:

	December 31, 2019		December 31, 2018	
Asset Class	Target Allocation	Long-term Expected Real Rate of Return	Target Allocation	Long-term Expected Real Rate of Return
Domestic Equity	17.5%	4.30%	17.5%	4.55%
International Equity	17.5%	6.10%	17.5%	6.35%
Core Fixed Income	10.0%	1.00%	10.0%	1.00%
Non-Core Fixed Income	20.0%	3.39%	20.0%	3.90%
Real Return	10.0%	3.78%	10.0%	3.80%
Real Estate	10.0%	4.44%	10.0%	4.50%
Absolute Return	10.0%	3.56%	10.0%	3.75%
Private Equity	5.0%	7.75%	5.0%	7.50%
Total	100.0%		100.0%	

The discount rate of 6.75% was used to measure the Total Pension Liability in the December 31, 2018 and 2017 actuarial valuations. The projection of cash flows used to determine the discount rate assumed that employee and employer contributions will be made at the rates specified in statute. Based on that assumption, the TMRS pension plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current active and inactive employees. 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.

The following table summarizes the changes in the TMRS Net Pension Liability for the year ended December 31, 2019 and 2018 based on the measurement date of December 31, 2018 and 2017, respectively.

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Changes in Net Pension Liability - TMRS
($ in thousands)

	2019 Increase (Decrease)			2018 Increase (Decrease)		
	Pension Liability (a)	Fiduciary Net Position (b)	Net Pension Liability (a) - (b)	Pension Liability (a)	Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at January 1,	$ 208,391	$ 192,768	$ 15,623	$ 198,069	$ 170,589	$ 27,480
Changes for the year:						
Service Cost	5,551	-	5,551	5,332	-	5,332
Interest	13,952	-	13,952	13,268	-	13,268
Differences between expected and actual experience	240	-	240	54	-	54
Changes in assumptions	-	-	-	-	-	-
Contributions - employer	-	4,059	(4,059)	-	3,852	(3,852)
Contributions - employee	-	3,291	(3,291)	-	3,149	(3,149)
Net investment income	-	(5,773)	5,773	-	23,639	(23,639)
Benefit payments	(8,960)	(8,960)	-	(8,332)	(8,332)	-
Administrative expense	-	(111)	111	-	(123)	123
Other charges	-	(6)	6	-	(6)	6
Net Changes	10,783	(7,500)	18,283	10,322	22,179	(11,857)
Balances at December 31, *	$ 219,174	$ 185,268	$ 33,906	$ 208,391	$ 192,768	$ 15,623

*Based on measurement date of December 31, 2018 and December 31, 2017 respectively

The following table presents the Net Pension Liability for the TMRS plan as of December 31, 2019 and December 31, 2018 calculated using the discount rate of 6.75%, as well as what the Net Pension Liability would be if it were calculated using a discount rate that is 1-percentage-point lower (5.75%) or 1-percentage-point higher (7.75%) than the current rate:

	TMRS Net Pension Liability/(Asset) *($ in thousands)*		
	1% Decrease 5.75%	Current Discount Rate 6.75%	1% Increase 7.75%
December 31, 2019	$ 62,448	$ 33,906	$ 10,233
December 31, 2018	$ 42,849	$ 15,623	$ (6,955)

San Antonio Water System Retirement Plan

The San Antonio Water System Retirement Plan (SAWSRP) is a single-employer pension plan, which serves as a supplement to SAWS' other retirement benefits. The plan has both a defined benefit and a defined contribution component. SAWS has delegated to Principal Financial Group the authority to manage plan assets and administer the payment of benefits under the plan.

The financial information for SAWSRP is reported in the SAWS Fiduciary Funds financial statements. SAWSRP does not issue stand-alone financial statements. A summary of the plan's financial statements for the years ended December 31, 2019 and 2018 is presented in the following tables.

San Antonio Water System Retirement Plan
Net Position Restricted for Pension Benefits
(amounts in thousands)

	December 31, 2019			December 31, 2018		
	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution	Total
Assets						
Investments	$ 242,461	$ 8,112	$ 250,573	$ 201,747	$ 4,557	$ 206,304
Total Assets	242,461	8,112	250,573	201,747	4,557	206,304
Liabilities	-	-	-	-	-	-
Net position restricted for pension benefits	$ 242,461	$ 8,112	$ 250,573	$ 201,747	$ 4,557	$ 206,304

San Antonio Water System Retirement Plan
Changes in Net Position Restricted for Pension Benefits
(amounts in thousands)
For the years ended

	December 31, 2019			December 31, 2018		
	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution	Total
Additions						
Employer Contributions	$ 9,131	$ 1,445	$ 10,576	$ 7,923	$ 1,152	$ 9,075
Employee Contributions	2,529	1,171	3,700	2,434	928	3,362
Investment Income (Loss)	38,721	1,354	40,075	(7,767)	(422)	(8,189)
Total additions	50,381	3,970	54,351	2,590	1,658	4,248
Deductions						
Pension payments/distributions	9,358	371	9,729	8,615	349	8,964
Administrative Expenses	309	44	353	360	12	372
	9,667	415	10,082	8,975	361	9,336
Increase/(Decrease) in net position	40,714	3,555	44,269	(6,385)	1,297	(5,088)
Net position restricted for pension benefits - beginning	201,747	4,557	206,304	208,132	3,260	211,392
Net position restricted for pension benefits - ending	$ 242,461	$ 8,112	$ 250,573	$ 201,747	$ 4,557	$ 206,304

Defined Benefit Component: Eligible employees hired prior to June 1, 2014 participate in the defined benefit component of the plan. Eligible employees vest in this plan after the completion of five years of service.

Covered employees are eligible to retire upon attaining the normal retirement age of 65. An employee may elect early retirement, with reduced benefits, upon attainment of (i) 20 years of vesting service regardless of age or (ii) five years of vesting service and at least age 60. An employee is automatically 100% vested upon attainment of age 65 or upon becoming totally and permanently disabled.

The normal retirement benefit is based upon two factors, average compensation and years of vesting service. Average Compensation is defined as the monthly average of total compensation received for the three consecutive years ending December 31, out of the last ten compensation years prior to normal retirement date which gives the highest average. The normal retirement benefit under SAWSRP is equal to the following:

1. 1.20% of the Average Compensation, times years of credited service not in excess of 25 years, plus
2. 0.75% of the Average Compensation, times years of credited service in excess of 25 years but not in excess of 35 years, plus
3. 0.375% of the Average Compensation, times years of credited service in excess of 35 years.

Upon retirement, an employee must select from one of eight alternative payment plans. Each payment plan provides for monthly payments as long as the retired employee lives. The options available address how plan benefits are to be distributed to the designated beneficiary of the retired employee. The program also provides disability benefits.

Participants in the defined benefit component of the SAWSRP as of the last two actuarial valuation dates is summarized below:

	January 1,	
	2019	2018
Active employees	1,098	1,184
Retirees and beneficiaries currently receiving benefits	1,064	1,007
Inactive members	541	526
Total	2,703	2,717

The funding policy provides for actuarially determined periodic contributions so that sufficient assets will be available to pay benefits when they are due. Contribution requirements are established and may be amended by SAWS Board of Trustees. The actuarially determined contributions for 2019 and 2018 were determined using the Entry Age Normal cost method. The actuarially determined contribution is the estimated amount necessary to finance the cost of benefits earned by participating employees during the year, with an additional amount to finance any unfunded accrued liability. Prior to 2015, active members made no contributions to the plan and all obligations with respect to the defined benefit feature of the plan were paid solely by SAWS. On January 1, 2015, active members began sharing in the cost of providing benefits under the plan by contributing 3% of their compensation.

The Net Pension Liability for the defined benefit component of the SAWSRP as of December 31, 2019 and 2018 was measured as of January 1, 2019 and 2018, respectively. The Total Pension Liability used to calculate the Net Pension Liability was determined by an actuarial valuation as of that date performed as of the measurement date.

The January 1, 2019 and 2018 valuations included the following actuarial assumptions:

	January 1, 2019	January 1, 2018
Annual Inflation	2.25%	2.00%
Rate of Return on Investments	6.50%	6.50%

Real wage growth is based on a service-related table based on SAWS' experience from 2011 to 2013 and SAWS' expectation of future experience.

Mortality rates for the January 1, 2019 valuation were based on PubG-2010 General base rate mortality table projected to future years with historical and assumed mortality improvement (MI) rates that were recently issued by the Society of Actuaries (SOA). PubG-2010 is the baseline mortality rate table underlying the SOA Pub-2010 experience study published in January 2019. The mortality improvement scale is based on MP2018 published in October 2018.

Mortality rates for the January 1, 2018 valuation were based on the RP-2006 total dataset mortality table projected to future years with historical and assumed MI rates using the Principal Mortality Improvement Scale (PFG2013-10). RP-2006 is a baseline mortality rates table underlying the Society of Actuaries (SOA) RP-2014 experience study as of central year of the experience data for 2004-2008 years. The Principal Mortality Improvement scale is based on the SOA MI model RPEC_2014_v2017 and Principal-selected assumption set published November 2017.

For the 2019 valuation, the expected long-term return on plan assets assumption was developed as a weighted average rate based on target asset allocation of the plan and the Long-Term Capital Market Assumptions (CMA) 2018. The capital market assumptions were developed with a primary focus on forward-looking valuation models, interest rates, risk-premium, and long-term performance patterns of the applicable asset classes. Due to the long-term nature of pension obligations, the investment horizon for the CMA 2018 is 20-30 years. The significant changes in the CMA 2018 compared to CMA 2016 included lower expected geometric returns for equity and alternative asset classes, higher expected geometric returns for fixed income asset classes and the addition of high quality corporate bond asset classes commonly used with liability driven investment pension strategies.

For the 2018 valuation, the expected long-term return on plan assets assumption was developed as a weighted average rate based on target asset allocation of the plan and the CMA 2016. The capital market assumptions were developed with a primary focus on forward-looking valuation models and market indicators. The key fundamental economic inputs for these models are future inflation, economic growth, and interest rate environment. Due to the long-term nature of pension obligations, the investment horizon for the CMA 2016 is 20-30 years. In addition to forward-looking models, historical analysis of market data and trends was reflected, as well as the outlook of recognized economists, organizations and consensus CMA from other credible studies.

The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table. The Long-term Expected Real Rate of Return amounts do not include inflation.

January 1, 2019			January 1, 2018		
Asset Class	Target Allocation	Long-term Expected Real Rate of Return	Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Total Return	34.0%	2.9%	US Equity - Large Cap	60.8%	6.50%
US Equity - Large Cap	19.0%	5.1%	Ultra Long Gov't Bond	19.8%	1.85%
International Equity	10.0%	3.9%	Aggregate Credit Bond	9.6%	4.05%
US Mid Cap Equity	10.0%	7.4%	Long Credit Bond	7.3%	4.75%
International Small/Mid Equity	7.0%	6.4%	Long Gov't Bond	2.4%	2.65%
US Small Cap Equity	7.0%	5.8%	Cash	0.1%	1.55%
Real Estate	7.0%	6.8%			
High Yield Bond	6.0%	4.7%			
Total	100.0%		Total	100.0%	

The discount rate used to measure the Total Pension Liability at December 31, 2019 and December 31, 2018 was 6.50%. The projection of cash flows used to determine the discount rate assumed that contributions will be made based on actuarial determined amounts. Based on that assumption, the SAWSRP defined benefit component's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current active and inactive employees. 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.

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The following table summarizes the changes in the SAWSRP Net Pension Liability for the year ended December 31, 2019 and 2018 based on the measurement date of January 1, 2019 and January 1, 2018, respectively.

Changes in Net Pension Liability - SAWSRP
($ in thousands)

	2019 Increase (Decrease)			2018 Increase (Decrease)		
	Pension Liability (a)	Fiduciary Net Position (b)	Net Pension Liability (a) - (b)	Pension Liability (a)	Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at January 1,	$ 230,568	$ 208,132	$ 22,436	$ 218,571	$ 175,279	$ 43,292
Changes for the year:						
Service Cost	5,629	-	5,629	5,859	-	5,859
Interest	15,101	-	15,101	14,354	-	14,354
Differences between expected and actual experience	1,926	-	1,926	(1,394)	-	(1,394)
Changes in assumptions	4,653	-	4,653	1,152	-	1,152
Contributions - employer	-	7,923	(7,923)	-	7,982	(7,982)
Contributions - employee	-	2,434	(2,434)	-	2,484	(2,484)
Net investment income	-	(7,767)	7,767	-	30,741	(30,741)
Benefit payments	(8,615)	(8,615)	-	(7,974)	(7,974)	-
Administrative expense	-	(360)	360	-	(380)	380
Net Changes	18,694	(6,385)	25,079	11,997	32,853	(20,856)
Balances at December 31,*	$ 249,262	$ 201,747	$ 47,515	$ 230,568	$ 208,132	$ 22,436

*Based on measurement date of January 1, 2019 and January 1, 2018, respectively

The following table presents the Net Pension Liability associated with the defined benefit component of the SAWSRP calculated at December 31, 2019 and December 31, 2018 using the discount rate of 6.50%, as well as what the Net Pension Liability/(Asset) would be if it were calculated using a discount rate of one percentage point lower (5.50%) or one percentage point higher (7.50%) than the current rate.

SAWSRP Net Pension Liability/(Asset) *($ in thousands)*

	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
December 31, 2019	$ 80,736	$ 47,515	$ 19,976
December 31, 2018	$ 52,953	$ 22,436	$ (2,939)

Defined Contribution Component: Eligible employees hired on or after June 1, 2014 participate in the defined contribution component of the SAWSRP. SAWS contributes 4% of participant's compensation into an individual retirement account. Participants are required to contribute 3% of their compensation into their individual retirement account. Contributions under the defined contribution feature of the plan are made to participants' individual retirement accounts on a bi-weekly basis based on the participants' compensation during the period. An eligible employee totally vests in SAWS contributions to the individual retirement account after one year of service and immediately vests in the employee's contributions to the plan. The employee directs the investments in their individual retirement account. SAWS has no liability for losses under the defined contribution component of the SAWSRP but does have the usual fiduciary responsibilities of a plan sponsor.

During the year ended December 31, 2019, SAWS made contributions to participants' individual retirement accounts totaling $1,445,000 net of forfeitures of $10,000 and employees contributed $1,171,000. During the year ended December 31, 2018, SAWS made contributions to participants' individual retirement accounts totaling $1,152,000, net of forfeitures of $33,000 and employees contributed $928,000.

District Special Project Retirement Income Plan

District Special Project Retirement Income Plan (DSPRP) is a single-employer defined benefit pension plan that covers all eligible employees. The plan was originally established by Bexar Metropolitan Water District (BexarMet) to provide pension benefits to its employees. In 2008, the BexarMet Board elected to freeze pension benefits and entry into the plan effective September 30, 2008. In 2012, BexarMet was dissolved and all its assets and liabilities were transferred to the San Antonio Water System District Special Project (DSP). The plan was renamed District Special Project Retirement Income Plan. In 2016, DSP was merged into SAWS and DSPRP is now governed by SAWS, which is authorized to establish and amend all plan provisions. SAWS has delegated the authority to manage plan assets and administer the payment of benefits under the plan to Standard Insurance Company.

The financial information for DSPRP is reported in the SAWS Fiduciary Funds financial statements. DSPRP does not issue stand-alone financial statements. A summary of the plan's financial statements for the years ended December 31, 2019 and 2018 is presented in the following tables.

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District Special Project Retirement Income Plan
Net Position Restricted for Pension Benefits
(amounts in thousands)

	December 31, 2019	December 31, 2018
Assets		
Investments	$ 6,652	$ 5,539
Total Assets	6,652	5,539
Liabilities	-	-
Net position restricted for pension benefits	$ 6,652	$ 5,539

District Special Project Retirement Income Plan
Changes in Net Position Restricted for Pension Benefits
(amounts in thousands)

	December 31, 2019	December 31, 2018
Additions		
Employer Contributions	$ 400	$ 400
Investment Income (Loss)	1,049	(75)
Total additions	1,449	325
Deductions		
Pension payments/distributions	330	485
Administrative Expenses	6	7
	336	492
Increase/(Decrease) in net position	1,113	(167)
Net position restricted for pension benefits - beginning	5,539	5,706
Net position restricted for pension benefits - ending	$ 6,652	$ 5,539

Prior to freezing entry into the plan, employees were eligible to enter on May 1st or November 1st following the completion of 12 months of employment and attaining age 21. Participating employees accrued benefits if they worked at least 1,000 hours per plan year. Eligible employees vested in this plan after the completion of five years of service. Employees are 100% vested in any benefits derived from employee contributions regardless of years of service. A terminating participant who has completed five years of service is entitled to receive a vested benefit starting on his/her normal retirement date.

The normal retirement benefit upon retirement is a percentage of average monthly earnings. Prior to March 1, 1996, the monthly benefit was 60% of average monthly earnings reduced proportionately for less than 15 years of service. Effective March 1, 1996, the monthly benefit was 40% of average monthly earnings reduced proportionately for less than 20 years of service. Prior to March 1, 1996, average monthly earnings were based on the monthly earnings during the five consecutive and complete calendar years that produced the highest average. After March 1, 1996, average monthly earnings are determined by the ten consecutive and complete calendar years after December 31, 1990 which produce the highest average. Upon retirement, retirees may choose from 3 different types of annuities or receive a single lump sum distribution.

Participants in DSPRP as of the last two actuarial valuation dates is summarized below:

	January 1, 2019	January 1, 2018
Active employees	96	101
Retirees and beneficiaries currently receiving benefits	11	10
Inactive members	36	33
Total	143	144

The plan's funding policy provides for actuarially determined periodic contributions so that sufficient assets will be available to pay benefits as they come due. Contribution requirements are established and may be amended by the Board. The unit credit method was used to calculate the actuarial determined contribution for 2019 and 2018. Under this method, the actual or expected accrued benefit of each participant is allocated to the year in which it accrues. The normal cost is the present value of benefits expected to accrue in the current year.

The Net Pension Liability for DSPRP as of December 31, 2019 and 2018 was measured as of January 1, 2019 and 2018, respectively. The Total Pension Liability used to calculate the Net Pension Liability was determined by an actuarial valuation as of that date performed as of the measurement date.

The January 1, 2019 and 2018 valuations included the following actuarial assumptions:

Annual Inflation	2.50%
Rate of Return on Investments	6.50%

For 2019, mortality rates are based on the SOA RP-2014 table projected on a fully generational basis using mortality improvement scale MP-2018. For 2018, mortality rates are based on the SOA RP-2014 table projected on a fully generational basis using mortality improvement scale MP-2017. Due to the limited size of this plan and the frozen nature of benefits under the plan, an experience study has not been done.

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

The target allocation and best estimates of arithmetic real rates of return for each major asset class for the January 1, 2019 and January 1, 2018 valuations are summarized in the following table:

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Domestic Equity	54.0%	6.00%
International Equity	5.0%	6.00%
Fixed Income	41.0%	1.00%

The discount rate used to measure the total pension liability at December 31, 2019 and December 31, 2018 was 6.5%. The projection of cash flows used to determine the discount rate assumed that contributions will be made equal to the actuarially determined contributions. Based on those assumptions, the defined benefit component'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 the defined benefit component's investments was applied to all periods of projected benefit payments to determine the total pension liability.

The following table summarizes the changes in the DSPRP Net Pension Liability for the year ended December 31, 2019 and 2018 based on the measurement date of January 1, 2019 and 2018, respectively.

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Changes in Net Pension Liability - DSPRP
($ in thousands)

	2019 Increase (Decrease)			2018 Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balances at January 1,	$ 6,566	$ 5,706	$ 860	$ 6,694	$ 5,410	$ 1,284
Changes for the year:						
Service Cost	257		257	108	-	108
Interest	388		388	424	-	424
Differences between expected and actual experience	(622)		(622)	101		101
Changes in assumptions	6		6	15		15
Contributions - employer		400	(400)		315	(315)
Net investment income		(75)	75	-	764	(764)
Benefit payments	(485)	(485)	-	(776)	(776)	-
Administrative expense	-	(7)	7	-	(7)	7
Net Changes	(456)	(167)	(289)	(128)	296	(424)
Balances at December 31,*	$ 6,110	$ 5,539	$ 571	$ 6,566	$ 5,706	$ 860

*Based on measurement date of January 1, 2019 and January 1, 2018 respectively

The following table presents the DSPRP Net Pension Liability calculated at December 31, 2019 and December 31, 2018 using the discount rate of 6.5%, as well as what the Net Pension Liability would be if it were calculated using a discount rate that is one percentage point lower (5.5%) or one percentage point higher (7.5%) than the current rate.

DSPRP Net Pension Liability *($ in thousands)*

	1% Decrease 5.50%	Current Discount Rate 6.50%	1% Increase 7.50%
December 31, 2019	$ 1,036	$ 571	$ 170
December 31, 2018	$ 1,122	$ 860	$ 632

Other Pension Disclosures

For the years ended December 31, 2019 and December 31, 2018, SAWS recognized pension expense under the TMRS, SAWSRP and DSPRP plans as follows:

Pension Expense
($ in thousands)
Year-ended December 31,

	2019	2018
TMRS	$ 6,818	$ 3,757
SAWSRP - defined benefit	10,597	6,098
SAWSRP - defined contribution	1,445	1,152
DSPRP	289	195
	$ 19,149	$ 11,202

There were no amounts payable to the pension plans by SAWS at December 31, 2019. Amounts payable to the pension plans by SAWS for contributions totaled $193,000 at December 31, 2018.

The following table summarizes the Deferred Outflows of Resources, Net Pension Liability and Deferred Inflows of Resources for each of the plans as reported in the Statement of Net Position for December 31, 2019 and 2018.

($ in thousands)	December 31, 2019			December 31, 2018		
Plan	Deferred Outflows of Resources	Net Pension Liability	Deferred Inflows of Resources	Deferred Outflows of Resources	Net Pension Liability	Deferred Inflows of Resources
TMRS	$ 14,374	$ 33,906	$ 295	$ 4,287	$ 15,623	$ 5,770
SAWSRP	25,887	47,515	792	13,036	22,436	11,552
DSPRP	915	571	799	780	860	485
Total - All Plans	$ 41,176	$ 81,992	$ 1,886	$ 18,103	$ 38,919	$ 17,807

At December 31, 2019, Deferred Outflows of Resources and Deferred Inflows of Resources associated with SAWS pension plans related to the following sources:

	TMRS		SAWSRP		DSPRP		All Plans	
($ in thousands)	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions made after the measurement date	$ 4,100	$ -	$ 9,131	$ -	$ 400	$ -	$ 13,631	$ -
Differences between expected and actual experience	228	295	1,759	706	163	799	2,150	1,800
Effects of changes in assumption	80	-	5,819	86	166	-	6,065	86
Net Difference between projected and actual earnings on pension plan investments	9,966	-	9,178	-	186	-	19,330	-
	$ 14,374	$ 295	$ 25,887	$ 792	$ 915	$ 799	$ 41,176	$ 1,886

At December 31, 2018, Deferred Outflows of Resources and Deferred Inflows of Resources associated with SAWS pension plans related to the following sources:

	TMRS		SAWSRP		DSPRP		All Plans	
($ in thousands)	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions made after the measurement date	$ 4,059	$ -	$ 7,923	$ -	$ 400	$ -	$ 12,382	$ -
Differences between expected and actual experience	59	895	623	1,173	193	296	875	2,364
Effects of changes in assumption	169	-	4,490	166	187	-	4,846	166
Net Difference between projected and actual earnings on pension plan investments	-	4,875	-	10,213	-	189	-	15,277
	$ 4,287	$ 5,770	$ 13,036	$ 11,552	$ 780	$ 485	$ 18,103	$ 17,807

Contributions made after the measurement date of $13,631,000 will be recognized as a reduction of the Net Pension Liability for the year ending December 31, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year Ended December 31,	($ in thousands) SAWSRP	TMRS	DSPRP	Combined
2020	$ 6,331	$ 3,403	$ 18	$ 9,752
2021	3,705	1,400	(50)	5,055
2022	1,654	1,392	(60)	2,986
2023	4,274	3,784	25	8,083
2024	-	-	(65)	(65)
Thereafter	-	-	(152)	(152)

The following table summarizes the components of the Net Pension Liability at December 31, 2019 and 2018 for the pension plans included in SAWS Fiduciary Fund Statements in accordance with *GASB 67, Financial Reporting for Pension Plans – An Amendment of GASB Statement 25*.

	December 31, 2019 (a)		December 31, 2018	
($ in thousands)	SAWSRP	DSPRP	SAWSRP	DSPRP
Total pension liability	$ 263,350	$ 5,929	$ 249,262	$ 6,110
Plan fiduciary net position	242,460	6,651	201,747	5,539
Net pension liability (asset)	$ 20,890	$ (722)	$ 47,515	$ 571
Plan fiduciary net position as a percentage of the total pension liability	92.1%	112.2%	80.9%	90.7%

(a) Actuarial valuation performed at January 1, 2019 was rolled forward to December 31, 2019

Deferred Compensation Plans

SAWS is the plan sponsor for two deferred compensation plans: the San Antonio Water System Deferred Compensation Plan and the District Special Project Employee's 457 Plan. Both plans were created in accordance with Internal Revenue Code Section 457 and allow employees to defer a portion of their salary until future years. The compensation deferred under these plans is not available to employees until termination, retirement, death, or qualifying unforeseeable emergency. Employee participation is voluntary and SAWS makes no contributions to these plans. The District Special Project Employee's 457 Plan was closed to new contributions effective October 1, 2013. SAWS has no liability for losses under these plans but does have the usual fiduciary responsibilities of a plan sponsor.

NOTE K – OTHER POST EMPLOYMENT BENEFITS (OPEB)

In addition to providing pension benefits described in Note J, SAWS provides certain health care and life insurance benefits for eligible retirees, their spouses, and their dependents through San Antonio Water System Retiree Health

Trust (SAWS OPEB Plan), a single-employer defined benefit plan administered by SAWS. The authority to establish and amend the SAWS OPEB Plan provisions is vested in the Board.

The financial information for SAWS OPEB Plan is reported in the fiduciary funds statements. SAWS OPEB Plan does not issue stand-alone financial statements. A summary of the plan's financial statements for the years ended December 31, 2019 and 2018 is presented in the following tables.

San Antonio Water System Retiree Health Plan
Net Position Restricted for Post Employment Benefits
(amounts in thousands)

	December 31, 2019	December 31, 2018
Assets		
Cash and cash equivalents	$ 1,627	$ 1,323
Investments	81,650	61,366
Total assets	83,277	62,689
Liabilities	-	-
Net position restricted for other post employment benefits	$ 83,277	$ 62,689

Changes in Net Position Restricted for Post Employment Benefits
For the year ended December 31,
(amounts in thousands)

	2019	2018
Additions		
Employer contributions	$ 13,811	$ 15,308
Investment income/(loss)	13,263	(3,163)
Total additions	27,074	12,145
Deductions		
Benefit payments	6,311	7,808
Administrative expenses	175	159
Total deductions	6,486	7,967
Increase in net position	20,588	4,178
Net position restricted for other post employment benefits - beginning	62,689	58,511
Net position restricted for other post employment benefits - ending	$ 83,277	$ 62,689

By state law, any employee that retires under a SAWS retirement plan is eligible, at the time of retirement, to obtain health insurance benefits similar to those offered to active SAWS employees. Retirees may also purchase coverage for their spouse and qualifying dependents at group rates partially subsidized by SAWS. Any plan participant eligible for Medicare is required to enroll in a Medicare Advantage Plan. No supplemental health benefits are provided to those participants enrolled in Medicare Advantage Plans. Employees hired after December 31, 2013 will not be eligible for any subsidized medical benefits upon retirement from SAWS.

Participants in the SAWS OPEB Plan as of January 1, 2019 and 2018 consisted of the following:

	January 1,	
	2019	2018
Active Employees	1,072	1,131
Retired Employees	850	852
Total	1,922	1,983

The contribution requirements of plan participants are established and may be amended by the Board. Contributions made by retirees for health insurance benefits vary based on retirement date, years of service and the health care options selected. Plan participants made contributions toward plan benefits totaling $1,613,000 in 2019 and $1,353,000 in 2018.

SAWS contributions to the plan are also established by the Board. Prior to 2012, SAWS only funded the shortfall between annual benefit payments and retiree contributions ("current benefit payments"). In March 2012, SAWS established a trust for the purpose of prefunding future benefit payments for eligible retirees and their dependents. In addition to making contributions to the trust, SAWS has continued to fund current benefit payments outside of the trust. SAWS intends to fund current benefit payments as well as make annual contributions to the trust in accordance with a plan that, at a minimum, fully funds the actuarially determined annual required contributions for these benefits thereby improving the funded status of the SAWS OPEB Plan over a period of time.

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

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future.

The following table summarizes the actuarial methods and assumptions used in the most recent actuarial valuations for the SAWS OPEB Plan.

Actuarial Methods and Assumptionis

Actuarial Valuation Date	January 1, 2019	January 1, 2018
Actuarial Value of Assets	Market Value	Market Value
Actuarial Cost Method	Entry Age Normal	Entry Age Normal
Remaining Amortization Method	15 Years - Closed	16 Years Closed
Actuarial Assumptions		
Investment Rate of Return	6.50%	6.50%
Inflation Rate	2.40%	2.50%
Healthcare Cost Trend:		
Initial	5.40%	5.50%
Ultimate	3.94%	3.84%

Mortality rates for the January 1, 2019 valuation were based PubG-2010 General base rate mortality table projected to future years with historical and assumed mortality improvement rates that were recently issued by the SOA. PubG-2010 is the baseline mortality rate table underlying the SOA Pub-2010 experience study published in January 2019. The mortality improvement scale is based on MP2018 published in October 2018.

For the 2018 valuations, the mortality rates were based on RP-2014 Healthy Employee Mortality Tables for males and females for pre-retirement employees and RP-2014 Healthy Annuitant Mortality Table for postemployment retirees. Historical and assumed mortality improvement (MI) was based on the Principal Mortality Improvement (PMI) Scale used by SAWSRP.

The following table summarizes the changes in Net OPEB Liability at December 31, 2019 and December 31, 2018.

Changes in Net OPEB Liability - SAWS OPEB Plan

($ in thousands)

	2019 Increase (Decrease)			2018 Increase (Decrease)		
	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)	Total OPEB Liability (a)	Plan Fiduciary Net Position (b)	Net OPEB Liability (a) - (b)
Balances at January 1,	$ 146,691	$ 58,511	$ 88,180	$ 144,960	$ 44,028	$ 100,932
Changes for the year:						
Service Cost	2,220		2,220	2,428		2,428
Interest	9,429		9,429	9,221		9,221
Differences between expected and actual experience	(11,970)		(11,970)	(3,358)		(3,358)
Changes in assumptions	2,817		2,817	(351)		(351)
Contributions - employer		15,308	(15,308)		13,709	(13,709)
Net investment income		(3,164)	3,164		7,127	(7,127)
Benefit payments	(7,808)	(7,808)	-	(6,209)	(6,209)	-
Administrative expense		(159)	159		(144)	144
Net Changes	(5,312)	4,177	(9,489)	1,731	14,483	(12,752)
Balances at December 31,*	$ 141,379	$ 62,688	$ 78,691	$ 146,691	$ 58,511	$ 88,180

*Based on measurement date of January 1, 2019 and January 1, 2018 respectively

The following table presents the change in the SAWS OPEB Plan Net OPEB Liability calculated at December 31, 2019 and 2018 assuming healthcare cost trends decrease or increase by one percentage point from the assumptions used in Total OPEB liability.

	($ in thousands)		
	1% Decrease	Current Assumptions	1% Increase
December 31, 2019	$ 71,968	$ 78,691	$ 88,859
December 31, 2018	$ 74,140	$ 88,180	$ 105,192

The target allocation and best estimates of arithmetic real rates of return for each major asset class for January 1, 2019 and January 1, 2018 are summarized in the following table. The Long-term Expected Real Rate of Return amounts do not include inflation.

Asset Class	Target Allocation	Long-term Expected Real Rate of Return
Fixed Income - Core Bond	38.0%	0.72%
Domestic Equity - Large Cap	36.0%	6.45%
Foreign Equity - Large Core	12.3%	6.35%
Domestic Equity - Small Cap	9.0%	7.82%
Foreign Equity - Emerging Markets	2.7%	8.96%
Cash	2.0%	0.00%
Total	100.0%	

The discount rate used to measure the Total OPEB Liability at December 31, 2019 and 2018 was 6.5%. The projection of cash flows used to determine the discount rate assumed that contributions will be made equal to the actuarially determined contributions. Based on those assumptions, the defined benefit component'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 the defined benefit component's investments was applied to all periods of projected benefit payments to determine the Total OPEB Liability.

The following table presents the SAWS OPEB Plan Net OPEB Liability calculated at December 31, 2019 and December 31, 2018 using the discount rate of 6.5%, as well as what the Net OPEB Liability would be if it were calculated using a discount rate that is one percentage point lower (5.5%) or one percentage point higher (7.5%) than the current rate.

	($ in thousands)		
	1% Decrease 5.5%	Current Discount Rate 6.5%	1% Increase 7.5%
December 31, 2019	$ 96,462	$ 78,691	$ 63,999
December 31, 2018	$ 106,770	$ 88,180	$ 72,899

SAWS recognized $5,228,000 in OPEB expense for the fiscal year ended December 31, 2019 based on a measurement date of December 31, 2018 and $6,997,000 in OPEB expense for the fiscal year ended December 31, 2018 based on a measurement date of December 31, 2017.

The following table summarized Deferred Outflows of Resources and Deferred Inflows of Resources associated with the SAWS OPEB Plan at December 31, 2019 and December 31, 2018 from the following sources.

	2019		2018	
($ in thousands)	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Contributions made after the measurement date	$ 13,811	$ -	$ 15,308	$ -
Differences between expected and actual experience	-	10,725	-	2,552
Effects of changes in assumption	2,113	183	-	267
Net Difference between projected and actual earnings on OPEB plan investments	3,346	-	-	3,221
	$ 19,270	$ 10,908	$ 15,308	$ 6,040

Contributions made after the measurement date of $13,811,000 will be recognized as a reduction of the Net OPEB Liability for the year ending December 31, 2019. Other amounts reported as deferred inflows of resources will be recognized in OPEB expense as follows:

Year Ended December 31,	*($ in thousands)*
2020	$ (2,542)
2021	(2,542)
2022	(1,805)
2023	1,440
Thereafter	-

The components of the Net OPEB Liability for the SAWS OPEB Plan at December 31, 2019 and 2018 were as follows:

	December 31,	
($ in thousands)	2019(a)	2018
Total OPEB liability	$ 144,476	$ 141,379
Plan fiduciary net position	83,276	62,688
Net OPEB liability	$ 61,200	$ 78,691
Plan fiduciary net position as a percentage of the total OPEB liability	57.6%	44.3%

(a) Actuarial valuation performed at January 1, 2019 was rolled forward to December 31, 2019

NOTE L – ASSET RETIREMENT OBLIGATIONS (AROs)

SAWS adopted GASB Statement No. 83, *Certain Asset Retirement Obligations,* effective January 1, 2019. SAWS accounts for AROs by recognizing the total obligation as a liability based on the best estimate of the current value of expenditures expected to be incurred once the assets are retired. The statement requires the effects of inflation or deflation on the ARO liability be adjusted annually. In addition to the ARO liability, SAWS has recorded associated outflows of resources that are being amortized over the remaining useful life of the respective asset groups. The total liability for AROs was $35,084,000 at December 31, 2019 and $34,120,000 at December 31, 2018. The following asset groups have been included in the ARO liability reflected in the Statements of Net Position.

Wastewater Treatment Plants (WTPs) – SAWS operates four WTPs in its service area. These plants are the Steven M. Clouse WTP, Leon Creek WTP, Medio Creek WTP and Mitchell Lake WTP. SAWS operates the Mitchell Lake WTP but the plant no longer receives wastewater flows. Due to the environmentally sensitive nature and ongoing wetlands project at the plant, the remaining life and the cost to retire the assets at Mitchell Lake WTP are not reasonably estimable and are not included in the ARO liability. The average remaining useful life of the other WTPs is 50 years. The Texas Commission on Environmental Quality requires that a WTP be decommissioned once no longer in service. The cost for decommissioning the other three plants was $33,000,000 at December 31, 2019 and $32,093,000 at December 31, 2018. The cost was determined using data from various 2006 contracts relating to the decommissioning of the Salado Creek WTP. The cost included a 10% design allowance. The data from the contracts was inflated to 2019 and 2018 dollars.

Underground Storage Tanks (USTs) – SAWS maintains 14 USTs, with an average remaining useful life of 10 years, across its service area for servicing fleet vehicles. Texas State Law, 30 Texas Administrative Code Chapter 334, requires that USTs be removed from the ground when they are no longer in use. The cost to remove these USTs from the ground is estimated to be $1,589,000 at December 31, 2019 and $1,546,000 at December 31, 2018. The cost was determined using data from a 2016 SAWS contract for the removal of USTs from SAWS' Northwest Service Center. The contract data was inflated to 2019 and 2018 dollars. The cost includes a 10% design allowance.

Desalination Injection Wells – SAWS currently has 2 injection wells in use with the desalination process. In connection with desalination injection well permits obtained by SAWS from the Texas Commission on Environmental Quality, SAWS has an obligation to plug the injection wells once the wells are no longer in service. These wells became operational in 2016 and have a remaining useful life of 46 years based on SAWS experience with other wells throughout the system. The cost to plug these wells was estimated to be $495,000 at December 31, 2019 and $481,000 at December 31, 2018. Data from past contracts for well plugging from 2012 to 2018 was used to determine the costs to plug the various wells currently in service. The contract data was inflated to 2019 and 2018 dollars. The cost includes a 10% design allowance.

The following table summarizes the ARO activity for 2019 and 2018.

	(amounts in thousands)				
	AROs Beginning of Year	Increases to AROs	AROs Retired	AROs at End of Year	AROs Due Within One Year
Year Ended December 31, 2019	$ 34,120	$ 964	$ -	$ 35,084	$ -
Year Ended December 31, 2018	$ 34,120	$ -	$ -	$ 34,120	$ -

NOTE M – RESTATED NET POSITION

Effective January 1, 2018, SAWS implemented GASB Statement No. 83, *Certain Asset Retirement Obligations*. GASB Statement No. 83 requires the effects of accounting change to be applied retroactively by restating the financial statements. SAWS adopted GASB Statement No. 83 in 2019 and accordingly, has restated amounts of the affected balances within the financial statements for the fiscal year ending December 31, 2018 as follows:

($ in thousands)	As Originally Reported	As Restated	Effects of Change
Statement of Net Position			
Deferred outflows of resources - AROs			
Unamortized asset retirement obligations	$ -	$ 32,511	$ 32,511
Total deferred outflows of resources - AROs		32,511	32,511
Noncurrent liabilities			
Payables under construction contracts	41,841	41,360	(481)
Asset retirement obligation	-	34,120	34,120
Total noncurrent liabilities	41,841	75,480	33,639
Net Position			
Net investment in capital assets	2,353,841	2,355,450	1,609
Unrestricted	368,348	365,611	(2,737)
Total Net Position	$ 3,106,823	$ 3,105,695	$ (1,128)
Statement of Revenues, Expenses and Changes in Net Position			
Operating Costs			
Depreciation and amortization expense	$ 154,422	$ 155,550	$ 1,128

NOTE N – SUBSEQUENT EVENTS

On February 19, 2020, SAWS issued $276,815,000 City of San Antonio, Texas Water System Revenue and Refunding Bonds, Series 2020A (No Reserve Fund). The proceeds from the sale of the bonds were issued to (i) refund the City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2010A (Series 2010A), (ii) refund the City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 2011A (Series 2011A), (iii) refund $93 million in outstanding commercial paper notes, (iv) finance capital improvements projects, and (v) pay the cost of issuance. The refunding of the Series 2010A and 2011A bonds reduced total future debt service payments by approximately $47.5 million and resulted in an economic gain of $32.2 million. The bonds are secured together with other outstanding Junior Lien Obligations solely by a lien on a pledge of net revenues and are subordinate to outstanding Senior Lien Obligations.

On March 18, 2020, SAWS issued $25,285,000 City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020B through the Texas Water Development Board. The bonds were sold under the Clean Water State Revolving Fund Program. The proceeds from the sale of the bonds were used to (i) finance capital improvement projects which qualify under the Texas Water Development Board Program, and (ii) pay the cost of issuance. The bonds are secured together with other outstanding Junior Lien Obligations solely by a lien on a pledge of net revenues and are subordinate to outstanding Senior Lien Obligations.

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REQUIRED SUPPLEMENTAL INFORMATION

Texas Municipal Retirement System - San Antonio Water System
Schedule of Changes in Net Pension Liability and Related Ratios (Unaudited)

($ in thousands)

	2018	2017	2016	2015	2014
Total pension liability					
Service Cost	$ 5,551	$ 5,332	$ 4,979	$ 4,810	$ 4,379
Interest	13,952	13,268	12,623	12,480	11,960
Differences between expected and actual experience	240	54	29	(1,311)	(1,717)
Changes of assumptions	-	-	-	433	-
Benefit payments	(8,960)	(8,332)	(8,186)	(7,337)	(7,461)
Net change in pension liability	10,783	10,322	9,445	9,075	7,161
Total pension liability at beginning of year	208,391	198,069	188,624	179,549	172,388
Total pension liability at end of year (a)	$ 219,174	$ 208,391	$ 198,069	$ 188,624	$ 179,549
Plan fiduciary net position					
Contributions - Employer	$ 4,059	$ 3,852	$ 3,609	$ 3,953	$ 3,721
Contributions - Employee	3,291	3,149	2,935	2,892	2,722
Net investment income	(5,773)	23,639	10,909	239	8,818
Benefit payments	(8,960)	(8,332)	(8,186)	(7,337)	(7,461)
Administrative expenses	(111)	(123)	(123)	(146)	(92)
Other	(6)	(6)	(7)	(7)	(8)
Net change in plan fiduciary net position	(7,500)	22,179	9,137	(406)	7,700
Plan fiduciary net position at beginning of year	192,768	170,589	161,452	161,858	154,158
Plan fiduciary net position at end of year (b)	$ 185,268	$ 192,768	$ 170,589	$ 161,452	$ 161,858
Net pension liability (a) - (b)	$ 33,906	$ 15,623	$ 27,480	$ 27,172	$ 17,691
Plan fiduciary net position as a percentage of the total pension liability	84.5%	92.5%	86.1%	85.6%	90.1%
Covered payroll	$ 109,703	$ 104,960	$ 97,818	$ 96,389	$ 90,721
Net pension liability as a percentage of total Covered payroll	30.9%	14.9%	28.1%	28.2%	19.5%

Notes to Schedule:

Changes of assumptions: In 2015, the long term rate of return was reduced from 7% to 6.75%. In 2015, mortality rates were updated to reflect updated historical data.

Other: GASB 68 requires 10 years of data to be provided in the Schedule of Contributions. As SAWS adopted GASB 68 in 2014, only 5 years of data is available. A full 10 years of data will be presented by 2023.

Texas Municipal Retirement System - San Antonio Water System
Schedule of Contributions (Unaudited)

($ in thousands)

	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ 4,100	$ 4,059	$ 3,852	$ 3,609	$ 3,672	$ 3,721
Contributions in relation to the actuarially determined contribution	4,100	4,059	3,852	3,609	3,953	3,721
Contribution deficiency/(excess)	$ -	$ -	$ -	$ -	$ (281)	$ -
Covered payroll	$ 113,749	$ 109,703	$ 104,960	$ 97,818	$ 96,389	$ 90,721
Contributions as a percentage of covered payroll	3.60%	3.70%	3.67%	3.69%	4.10%	4.10%

Notes to Schedule:

Valuation date: Actuarially determined contributions are calculated as of December 31st and become effective 12 months later on January 1st.

Methods and assumptions used to determine contributions:

Actuarial cost method	Entry Age Normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	For 2019, the remaining amortization period is 26 years. In 2015, the remaining amortization period was adjusted to 30 years from 23 years in 2014
Asset valuation method	10 year smoothed market; 15% soft corridor
Inflation	In 2015, the inflation rate was changed to 2.5% from 3.0% in 2014.
Salary increases	The assumption was 3.5% to 10.5% for 2015 to 2019 and 3.5% to 12.0% in 2014.
Investment rate of return	In 2015 the investment rate of return was lowered from 7.0% to 6.75%.
Retirement age	Experience-based table of rates that are specific to SAWS plan of benefits. Last updated for the 2015 valuation pursuant to an experience study of the period 2010 - 2014.
Mortality	RP2000 Combined Mortality Table with Blue Collar Adjustment with male rates multiplied by 109% and female rates multiplied by 103% and projected on a fully generational basis with scale BB

Other: GASB 68 requires 10 years of data to be provided in the Schedule of Contributions. As SAWS adopted GASB 68 in 2014, only 6 years of data is available. A full 10 years of data will be presented by 2023.

San Antonio Water System Retirement Plan - Defined Benefit Component
Schedule of Changes in Net Pension Liability and Related Ratios (Unaudited)
($ in thousands)

	2019	2018	2017	2016	2015	2014
Total pension liability						
Service Cost	$ 5,464	$ 5,629	$ 5,859	$ 5,724	$ 5,004	$ 5,204
Interest	16,282	15,101	14,354	13,680	12,596	11,709
Changes of benefit terms					4,339	
Differences between expected and actual exp	1,700	1,926	(1,394)	712	555	(622)
Changes of assumptions	-	4,653	1,152	5,532	(405)	2,771
Benefit payments	(9,358)	(8,615)	(7,974)	(7,283)	(6,318)	(5,796)
Net change in pension liability	14,088	18,694	11,997	18,365	15,771	13,266
Total pension liability at beginning of year	249,262	230,568	218,571	200,206	184,435	171,169
Total pension liability at end of year (a)	$ 263,350	$ 249,262	$ 230,568	$ 218,571	$ 200,206	$ 184,435
Plan fiduciary net position						
Contributions - Employer	$ 9,131	$ 7,923	$ 7,982	$ 7,367	$ 7,890	$ 10,339
Contributions - Employee	2,528	2,434	2,484	2,533	2,357	-
Net investment income / (loss)	38,721	(7,767)	30,741	6,971	1,215	15,695
Benefit payments	(9,358)	(8,615)	(7,974)	(7,283)	(6,318)	(5,796)
Administrative expenses	(309)	(360)	(380)	(195)	(17)	-
Net change in plan fiduciary net position	40,713	(6,385)	32,853	9,393	5,127	20,238
Plan fiduciary net position at beginning of ye	201,747	208,132	175,279	165,886	160,759	140,521
Plan fiduciary net position at end of year (b)	$ 242,460	$ 201,747	$ 208,132	$ 175,279	$ 165,886	$ 160,759
Net pension liability (a) - (b)	$ 20,890	$ 47,515	$ 22,436	$ 43,292	$ 34,320	$ 23,676
Plan fiduciary net position as a percentage of the total pension liability	92.1%	80.9%	90.3%	80.2%	82.9%	87.2%
Covered payroll	$ 76,320	$ 78,348	$ 79,417	$ 83,493	$ 85,299	$ 83,812
Net pension liability as a percentage of total covered payroll	27.4%	60.6%	28.3%	51.9%	40.2%	28.2%

Notes to Schedule:

Current year calculation: Total pension liability at December 31, 2019 is based on a rollforward of the January 1, 2019 actuarial valuation.

Benefit Changes: In 2015, the normal form of distribution changed and a mandatory employee contribution of 3% was instituted. Effective June 1, 2014, the defined benefit plan was frozen to new entrants.

Changes of assumptions: In 2019, the mortality assumption was updated to the public retirement plans mortality tables published by the SOA. In 2018 and 2017, the mortality assumption was updated for the latest improvement scale. In 2016, the long term rate of return was reduced to 6.5%. In 2015, mortality rates were updated to reflect historical data. In 2014, the long term rate of return was reduced to 6.75%.

Other: GASB 68 requires 10 years of data to be provided. As SAWS adopted GASB 68 in 2014, only 6 years of data is available. A full 10 years of data will be available by 2023.

San Antonio Water System Retirement Plan - Defined Benefit Component
Schedule of Contributions (Unaudited)
($ in thousands)

	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ 9,131	$ 7,923	$ 7,982	$ 7,367	$ 7,890	$ 10,339
Contributions in relation to the actuarially determined contribution	9,131	7,923	7,982	7,367	7,890	10,339
Contribution deficiency/(excess)	$ -	$ -	$ -	$ -	$ -	$ -
Covered payroll	$ 76,320	$ 78,348	$ 79,417	$ 83,493	$ 85,299	$ 83,812
Contributions as a percentage of covered payroll	12.0%	10.1%	10.1%	8.8%	9.2%	12.3%

Notes to Schedule:

Valuation date: Actuarially determined contributions are determined as of January 1st of the year in which the contributions are made.

Methods and assumptions used to determine contributions:

Actuarial cost method	Entry Age Normal
Remaining amortization period	Unfunded Liability at December 31, 2013 of $40,551,000 is being amortized over a 15 fixed year period. The annual impact of experience gains/losses, plan amendments and changes in plan assumptions are amortized over
Asset valuation method	4 year smoothed market
Inflation	In 2019, rate was changed to 2.25%. In 2017, the rate was changed to 2%, previously it was 2.25%
Salary increases	Scale based on 2011-2013 SAWS experience.
Retirement age	In 2015, expected retirement ages were adjusted to reflect actual experience from 2011-2013. Previously, the retirement age was based on experience from 2011-2012.
Investment rate of return	In 2017, the rate was changed from 6.75% to 6.5%, net of pension expense, including inflation. In 2014, the rate was changed from 7.0% to 6.75%.
Mortality Table	In 2019, the mortality assumption was updated to the public retirement plans mortality tables published by the SOA. In 2018 and 2017, the mortality assumption was updated for the latest improvement scale. In 2016, the mortality table was changed to use adjusted RP-2014 mortality with scale MP-2016 based on data published by the SOA in 2015. Previously, the IRS Prescribed Generational Mortality table was used.

Other: GASB 68 requires 10 years of data to be provided. As SAWS adopted GASB 68 in 2014, only 6 years of data is available. A full 10 years of data will be available by 2023.

San Antonio Water System Retirement Plan - Defined Benefit Component
Schedule of Investment Returns (Unaudited)

	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	19.10%	-3.71%	17.37%	4.21%	0.76%	11.34%

District Special Project Retirement Income Plan

Schedule of Changes in Net Pension Liability and Related Ratios (Unaudited)

($ in thousands)

	2019	2018	2017	2016	2015	2014
Total Pension Liability						
Service cost	$ 243	$ 257	$ 108	$ 71	$ 124	$ 123
Interest	372	388	424	418	446	424
Benefit payments	(330)	(485)	(776)	(324)	(261)	(230)
Changes in assumptions		6	15	221		
Difference between expected and actual experience	(466)	(622)	101	(381)	18	153
Net change in Total Pension Liability	(181)	(456)	(128)	8	327	470
Total Pension Liability - beginning	6,110	6,566	6,694	6,686	6,359	5,889
Total Pension Liability - ending (a)	$ 5,929	$ 6,110	$ 6,566	$ 6,694	$ 6,686	$ 6,359
Fiduciary Net Position						
Employer contributions	$ 400	$ 400	$ 315	$ 280	$ 308	$ 414
Net investment income / (loss)	1,049	(75)	764	306	18	394
Benefit payments	(330)	(485)	(776)	(324)	(261)	(230)
Administrative expenses	(7)	(6)	(7)	(8)	(6)	(11)
Net change in Fiduciary Net Position	1,112	(166)	296	254	59	567
Fiduciary Net Position - beginning	5,540	5,706	5,410	5,156	5,097	4,530
Fiduciary Net Position - ending (b)	$ 6,652	$ 5,540	$ 5,706	$ 5,410	$ 5,156	$ 5,097
Net Pension Liability (Asset) (a) - (b)	$ (723)	$ 570	$ 860	$ 1,284	$ 1,530	$ 1,262
Fiduciary Net Position as a percentage of the Total Pension Liability	112.2%	90.7%	86.9%	80.8%	77.1%	80.2%
Covered payroll (frozen plan)	n/a	n/a	n/a	n/a	n/a	n/a
Net Pension Liability as a percentage of covered payroll	n/a	n/a	n/a	n/a	n/a	n/a

Notes to schedule:

The plan was frozen in 2008. Therefore, current & future wages have no impact on Net Pension Liability.

Total pension liability at December 31, 2019 is based on a rollforward of the January 1, 2019 actuarial valuation.

Changes in assumptions: In 2019, the mortality projection scale was updated to MP-2018. In 2018, the mortality projection scale was based on MP-2017. In 2017, the mortality table was changed from 1994 GAR projected to 2002 to the RP 2014 table using the MP 2016 improvement scale. In 2017, the interest rate of return was modified from 7% to 6.5%.

Other: GASB 68 requires 10 years of data to be provided in the Schedule of Contributions. As SAWS adopted GASB 68 in 2014, only 6 years of data is available. A full 10 years of data will be presented by 2023.

District Special Project Retirement Income Plan
Schedule of Contributions (Unaudited)
($ in thousands)

	2019	2018	2017	2016	2015	2014
Actuarially determined contribution	$ 388	$ 247	$ 315	$ 279	$ 274	$ 307
Contributions in relation to the actuarially determined contribution	400	400	315	280	308	414
Contribution deficiency/(excess)	$ (12)	$ (153)	$ -	$ (1)	$ (34)	$ (107)
Covered payroll (frozen plan)	n/a	n/a	n/a	n/a	n/a	n/a
Contributions as a percentage of covered payroll	n/a	n/a	n/a	n/a	n/a	n/a

Notes to Schedule:

Valuation date: Actuarially determined contributions are determined as of January 1 of the year in which the contributions are made.

Methods and assumptions used to determine contributions:

Actuarial cost method	Unit Credit
Amortization method	Rolling level amortization over a declining period
Remaining amortization period	8 years (2019), 9 years (2018), 10 years(2017), 11 years(2016), 12 years(2015), 13 years(2014)
Asset valuation method	Fair value with smoothing
Inflation	In 2015, the inflation rate was changed to 2.75%. Previously, 2% was used.
Salary increase	Earned benefits frozen in 2008
Investment rate of return	In 2017, the rate was changed to 6.5%. Previously, 7.0%, net of pension plan investment expense, including inflation was used.
Retirement age	Normal retirement age - the earlier of (a) age 65 or (b) the "rule of 90" where the participant's age and years of service added together equal 90 or greater.
Mortality	In 2019, the mortality projection scale was updated to MP 2018. In 2018, the mortality projection scale was based on MP-2017. In 2017, the table was changed to the RP-2014 table using mortality improvement scale MP-2016. Previously,1994 GAR projected to 2002 was used.

Other: GASB 68 requires 10 years of data to be provided in the Schedule of Contributions. As SAWS adopted GASB 68 in 2014, only 6 years of data is available. A full 10 years of data will be presented by 2023.

District Special Project Retirement Income Plan
Schedule of Investment Returns (Unaudited)

	2019	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of investment expense	18.83%	-1.32%	14.76%	5.98%	0.29%	8.55%

San Antonio Water System Other Post Employment Benefit Plan
Schedule of Changes in Net OPEB Liability and Related Ratios (Unaudited)

($ in thousands)

	2019	2018	2017
Total OPEB liability			
Service Cost	$ 1,913	$ 2,220	$ 2,428
Interest	9,112	9,429	9,221
Differences between expected and actual experience	(1,617)	(11,970)	(3,358)
Changes of assumptions	-	2,817	(351)
Benefit payments	(6,311)	(7,808)	(6,209)
Net change in OPEB liability	3,097	(5,312)	1,731
Total OPEB liability at beginning of year	141,379	146,691	144,960
Total OPEB liability at end of year (a)	$ 144,476	$ 141,379	$ 146,691
Plan fiduciary net position			
Contributions - Employer	$ 13,811	$ 15,308	$ 13,709
Net investment income / (loss)	13,263	(3,164)	7,127
Benefit payments	(6,311)	(7,808)	(6,209)
Administrative expenses	(175)	(159)	(144)
Net change in plan fiduciary net position	20,588	4,177	14,483
Plan fiduciary net position at beginning of yea:	62,688	58,511	44,028
Plan fiduciary net position at end of year (b)	$ 83,276	$ 62,688	$ 58,511
Net OPEB liability (a) - (b)	$ 61,200	$ 78,691	$ 88,180
Plan fiduciary net position as a percentage of the total OPEB liability	57.6%	44.3%	39.9%
Covered employee payroll	$ 68,894	$ 71,520	$ 75,916
Net OPEB liability as a percentage of total covered payroll	88.8%	110.0%	116.2%

Notes to Schedule:

Total OPEB liability at December 31, 2019 is based on a rollforward of the January 1, 2019 actuarial valuation.

Changes in assumptions: In 2019, health care cost trends ultimate rate was changed to 3.94% in 2075. In 2018, health care cost trends ultimate rate was changed to 3.84% in 2075. In 2019, the mortality table was changed to the public retirement plans mortality tables published by the SOA. The mortality table was updated for 2018 & 2017.

Other: GASB 74 requires 10 years of data to be provided in the Schedule of Contributions. As SAWS adopted GASB 74 in 2017, only 3 years of data is available. A full 10 years of data will be presented by 2026.

San Antonio Water System Other Post Employment Benefit Plan
Schedule of Contributions (Unaudited)

($ in thousands)

	2019	2018	2017
Actuarially determined contribution	$ 10,407	$ 11,392	$ 12,412
Contributions in relation to the actuarially determined contribution	13,811	15,308	13,709
Contribution deficiency/(excess)	$ (3,404)	$ (3,916)	$ (1,297)
Covered employee payroll	$ 68,894	$ 71,520	$ 75,916
Contributions as a percentage of covered payroll	20.0%	21.4%	18.1%

Notes to Schedule:

Valuation date: Actuarially determined contributions are determined as of January 1 of the year in which the contributions are made.

Methods and assumptions used to determine contributions:

Actuarial cost method	Entry Age Normal
Salary increases	Scale based on 2011-2013 SAWS experience
Mortality Assumptions:	In 2019, the mortality tables were changed to the public retirement plans mortality tables published by the SOA. Previously, the RP-2014 mortality tables for Healthy Employee/Annuitant updated annually were used.
Inflation	2.4% for 2019. 2.5% was used for 2017 and 2018.
Salary increases	3.25% to 10.50%, varies by age.
Healthcare cost trend rates:	
Current Year	5.40%
Ultimate trend rate	2019 - 3.94%, 2018 - 3.84%, 2017 - 4.14%
Ultimate year	2019 & 2018 - 2075, 2017 - 2074
Investment rate of return	6.50%
Remaining amortization period	15 years

GASB 74 requires 10 years of data to be provided in the Schedule of Contributions. Since SAWS implemented GASB 74 in 2017, only 3 years of data is available. A full 10 years of data will be presented by 2026.

San Antonio Water System Other Post Employment Benefit Plan
Schedule of Investment Returns (Unaudited)

	2019	2018	2017
Annual money-weighted rate of return, net of investment expense	19.96%	-5.11%	14.69%

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APPENDIX C

UNAUDITED FINANCIAL STATEMENTS (THROUGH JUNE 30, 2020)

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San Antonio Water System (SAWS)

Summary of Revenues, Expenses and Changes in Net Position - Unaudited

(All amounts in millions)

	Six Months Ended June 30,		12 Months Ended June 30,	
	2020	2019	2020	2019
Revenues				
Water Supply	$ 124.1	$ 89.5	253.4	198.3
Water Delivery	101.4	100.2	230.4	215.4
Wastewater	131.3	136.7	269.1	268.7
Chilled Water & Steam	4.6	4.7	10.6	10.2
Total operating revenues	361.4	331.1	763.5	692.6
Non-operating revenue	14.1	20.3	26.4	35.6
Total revenues	375.5	351.4	789.9	728.2
Expenses				
Operating and maintenance	162.0	161.4	338.7	329.7
Depreciation expense	85.4	76.6	166.0	153.1
Interest and debt related	58.4	53.3	106.9	98.3
Transfer to City of San Antonio	14.2	8.9	27.2	18.6
Other	(0.2)	(0.6)	(0.3)	(0.9)
Total expenses	319.8	299.6	638.5	598.8
Income before capital contributions	55.7	51.8	151.4	129.4
Capital Contributions	90.6	88.0	179.9	156.7
Change in Net Position	146.3	139.8	331.3	286.1
Beginning Net Position	3,430.5	3,105.7	3,245.5	2,959.4
Ending Net Position	$ 3,576.8	$ 3,245.5	3,576.8	3,245.5

San Antonio Water System (SAWS)
Summary of Net Position Information - Unaudited
(All amounts in millions)

	June 30, 2020	June 30, 2019
Assets		
Current Assets	$ 757.1	$ 627.5
Noncurrent Assets	399.5	390.9
Capital Assets, Net	6,696.3	5,388.0
Total Assets	7,852.9	6,406.4
Deferred Outflows of Resources	138.8	114.5
Total Assets and Deferred Outflows of Resources	7,991.7	6,520.9
Liabilities		
Current Liabilities	232.5	182.4
Long Term Liabilities - Benefits & AROs	201.7	165.1
Long Term Liabilities - Contract Payable(a)	911.2	-
Long Term Debt, Net	3,056.7	2,904.1
Total Liabilities	4,402.1	3,251.6
Deferred Inflows of Resources	12.8	23.8
Total Liabilities and Deferred Inflows of Reources	4,414.9	3,275.4
Net Position		
Net Investment in Capital Assets	2,894.0	2,654.7
Restricted	278.2	272.6
Unrestricted	404.6	318.2
Total Net Position	$ 3,576.8	$ 3,245.5

(a) This amount represents the long-term portion of the liability SAWS recorded during April 2020 to reflect the beginning of its payment obligations under the Vista Ridge Regional Water Supply Project Water Transmission and Purchase Agreement (See "THE SAN ANTONIO WATER SYSTEM - Water Transmission and Purchase Agreement for Carrizo and Simsboro Aquifer Water" in the Official Statement).

APPENDIX D

SELECTED PROVISIONS OF THE ORDINANCE

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APPENDIX D

SELECTED PROVISIONS OF THE ORDINANCE

The following constitutes a summary of certain selected provisions of the Ordinance. This summary should be qualified by reference to other provisions of the Ordinance referred to elsewhere in this Official Statement, and all references and summaries pertaining to the Ordinance in this Official Statement are, separately and in whole, qualified by reference to the exact terms of the Ordinance, a copy of which may be obtained from the City.

SECTION 9: Definitions. For all purposes of this Ordinance (as defined below), except as otherwise expressly provided or unless the context otherwise requires: (i) the terms defined in this Section have the meanings assigned to them in this Section, and certain terms used in Sections 37 and 52 of this Ordinance have the meanings assigned to them in such Sections, and all such terms include the plural as well as the singular; (ii) all references in this Ordinance to designated "Sections" and other subdivisions are to the designated Sections and other subdivisions of this Ordinance as originally adopted; and (iii) the words "herein", "hereof", and "hereunder" and other words of similar import refer to this Ordinance as a whole and not to any particular Section or other subdivision.

A. The term *Additional Junior Lien Obligations* shall mean (i) bonds, notes, warrants, certificates of obligation or other obligations hereafter issued by the City payable wholly or in part from and equally and ratably secured, together with the currently outstanding Junior Lien Obligations, by a junior and inferior lien and pledge of the Net Revenues of the System, that is junior and inferior to the lien on and pledge thereof securing the payment of the currently outstanding Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City, all as further provided in Section 21 of this Ordinance, and (ii) any obligations issued to refund the foregoing that are payable from and secured by a junior lien on and pledge of the Net Revenues of the System as determined by the City Council in accordance with any applicable law.

B. The term *Additional Senior Lien Obligations* shall mean (i) any bonds, notes, warrants, certificates of obligation, or other evidences of indebtedness which the City reserves the right to issue or enter into, as the case may be, in the future under the terms and conditions provided in Section 21 of this Ordinance and which are equally and ratably secured solely by a prior and first lien on and pledge of the Pledged Revenues of the System and (ii) any obligations hereafter issued to refund any of the foregoing if issued in a manner so as to be payable from and secured by a prior and first lien on and pledge of the Pledged Revenues as determined by the City Council in accordance with applicable law.

C. The term *Additional Subordinate Lien Obligations* means (i) any bonds, notes, warrants, certificates of obligation, or other Debt hereafter issued by the City that are payable, in whole or in part, from and equally and ratably secured by a lien on and pledge of the Net Revenues, such pledge being subordinate and inferior to the lien on and pledge of the Net Revenues that are or will be pledged to the payment of the currently outstanding Senior Lien Obligations and Junior Lien Obligations and any Additional Senior Lien Obligations or Additional Junior Lien Obligations hereafter issued by the City, but prior and superior to the lien on and pledge of the Net Revenues that will be pledged to the payment of any Inferior Lien Obligations hereafter issued by the City, and (ii) obligations hereafter issued to refund any of the foregoing if issued in a manner that provides that the refunding bonds are payable from and equally and ratably secured, in whole or in part, by a subordinate and inferior lien on and pledge of the Net Revenues as determined by the City Council in accordance with applicable law.

D. The term *Authorized Officials* shall mean any of the Mayor, the City Clerk (including the Acting City Clerk), the City Manager, the City's Chief Financial Officer, the President/Chief Executive Officer of the Board and/or the Senior Vice President/Chief Financial Officer of the Board.

E. The term *Average Annual Debt Service Requirements* shall mean that average amount which, at the time of computation, will be required to pay the Debt Service Requirements on the Bonds when due (either at Stated Maturity or mandatory redemption) and derived by dividing the total of such Debt Service Requirements by the number of Fiscal Years then remaining before Stated Maturity of such Bonds. For purposes of this definition, a fractional period of a Fiscal Year shall be treated as an entire Fiscal Year. Capitalized interest payments provided from bond proceeds shall be excluded in making the aforementioned computation.

F. The term *Board* shall mean the Board of Trustees of the System created and described in Section 41 of this Ordinance.

G. The term *Bond Fund* shall mean the special Fund or account created and established by the provisions of Section 13 of this Ordinance.

H. The term *Bonds* shall mean the $153,390,000 "CITY OF SAN ANTONIO, TEXAS WATER SYSTEM JUNIOR LIEN REVENUE BONDS, SERIES 2020C (NO RESERVE FUND)", dated July 1, 2020, authorized by this Ordinance.

I. The term *City* shall mean the City of San Antonio, Texas, located in the State of Texas and, where appropriate, the City Council of the City.

J. The term *Closing Date* shall mean the date of physical delivery of the Initial Bond for the payment in full by the Purchaser.

K. The term *CPS Contract* shall mean the Wastewater Contract executed on September 15, 1990 between the Alamo Conservation and Reuse District and the City Public Service Board of San Antonio. Pursuant to Ordinance No. 74983 the City Council abolished the Alamo Conservation and Reuse District and assumed all of such entity's assets and obligations by creating the Department of Water Reuse as a new City department and a part of the System pursuant to the provisions of the City's Home Rule Charter.

L. The term *Credit Agreement* shall mean a loan agreement, revolving credit agreement, agreement establishing a line of credit, letter of credit, reimbursement agreement, insurance contract, commitments to purchase Debt, purchase or sale agreements, interest rate swap agreements, or commitments or other contracts or agreements authorized, recognized, and approved by the City as a Credit Agreement in connection with the authorization, issuance, security, or payment of any Debt.

M. The term *Credit Facility* shall mean (i) a policy of insurance or a surety bond, issued by an issuer of policies of insurance insuring the timely payment of debt service on governmental obligations, provided that a rating agency having an outstanding rating on any Debt would rate such Debt fully insured by a standard policy issued by the insurer in its highest generic rating category for such obligations (provided that, at such time that the Previously Issued Junior Lien Obligations issued prior to January 1, 2010 are no longer Outstanding, the requirement of a credit rating in the highest general category shall no longer be of any effect); or (ii) a letter or line of credit issued by any financial institution, provided that a rating agency having an outstanding rating on any Debt would rate such Debt in one of its two highest generic rating categories for such obligations if the letter or line of credit proposed to be issued by such financial institution secured the timely payment of the entire principal amount of such Debt and the interest thereon.

N. The term *Credit Provider* shall mean any bank, financial institution, insurance company, surety bond provider, or other institution which provides, executes, issues, or otherwise is a party to or provider of a Credit Agreement.

O. The term *Debt* shall mean

(1) all indebtedness payable from Pledged Revenues and/or Net Revenues incurred or assumed by the City for borrowed money (including indebtedness payable from Pledged Revenues and/or Net Revenues arising under Credit Agreements) and all other financing obligations of the System payable from Pledged Revenues and/or Net Revenues that, in accordance with generally accepted accounting principles, are shown on the liability side of a balance sheet; and

(2) all other indebtedness payable from Pledged Revenues and/or Net Revenues (other than indebtedness otherwise treated as Debt hereunder) for borrowed money or for the acquisition, construction, or improvement of property or capitalized lease obligations pertaining to the System that is guaranteed, directly or indirectly, in any manner by the City, or that is in effect guaranteed, directly or indirectly, by the City through an agreement, contingent or otherwise, to purchase any such indebtedness or to advance or supply funds for the payment or purchase of any such indebtedness or to purchase property or services primarily for the purpose of enabling the debtor or seller to make payment of such indebtedness, or to assure the owner of the indebtedness against loss, or to supply funds to or in any other manner invest in the debtor (including any agreement to pay for property or services irrespective of whether or not such property is delivered or such services are rendered), or otherwise.

For the purpose of determining *Debt*, there shall be excluded any particular Debt if, upon or prior to the maturity thereof, there shall have been deposited with the proper depository (a) in trust the necessary funds (or investments that will provide sufficient funds, if permitted by the instrument creating such Debt) for the payment, redemption, or satisfaction of such Debt or (b) evidence of such Debt deposited for cancellation; and thereafter it shall not be considered Debt. No item shall be considered Debt unless such item constitutes indebtedness under generally accepted accounting principles applied on a basis consistent with the financial statements of the System in prior Fiscal Years.

P. The term *Debt Service Requirements* shall mean as of any particular date of computation, with respect to any obligations and with respect to any period, the aggregate of the amounts to be paid or set aside by the City as of such date or in such period for the payment of the principal of, premium, if any, and interest (to the extent not capitalized) on such obligations; assuming, in the case of obligations without a fixed numerical rate, that such obligations bear interest calculated by assuming (i) that the interest rate for every 12-month period on such bonds is equal to the rate of interest reported in the most recently published edition of *The Bond Buyer* (or its successor) at the time of calculation as the "Revenue Bond Index" or, if such Revenue Bond Index is no longer being maintained by *The Bond Buyer* (or its successor) at the time of calculation, such interest rate shall be assumed to be 80% of the rate of interest then being paid on United States Treasury obligations of like maturity and (ii) that the principal of such bonds is amortized such that annual debt service is substantially level over the remaining stated life of such bonds, and further assuming in the case of obligations required to be redeemed or prepaid as to principal prior to Stated Maturity, the principal amounts thereof will be redeemed prior to Stated Maturity in accordance with the mandatory redemption provisions applicable thereto.

Q. The term *Depository* shall mean one or more official depository banks of the Board.

R. The term *Designated Financial Officer* shall mean the Chief Financial Officer of the City, President/Chief Executive Officer of the Board, the Senior Vice President/Chief Financial Officer of the Board, or such other financial or accounting official of the Board so designated by the City Council.

S. The term *Engineer* shall mean an individual, firm, or corporation engaged in the engineering profession, being a registered professional engineer under the laws of the State of Texas, having specific experience with respect to water, wastewater, reuse water, and/or stormwater drainage systems similar to the System and such individual, firm, or corporation may be employed by, or may be an employee of, the City or the Board.

T. The term *Fiscal Year* shall mean the twelve month accounting period used by the Board in connection with the operation of the System, currently ending on December 31 of each year, which may be any twelve consecutive month period established by the Board, but in no event may the Fiscal Year be changed more than one time in any three calendar year period.

U. The term *Government Securities* means (i) direct noncallable obligations of the United States, including obligations that are unconditionally guaranteed by, the United States of America; (ii) noncallable obligations of an agency or instrumentality of the United States, including obligations that are unconditionally guaranteed or insured by the agency or instrumentality and that, on the date the governing body of the issuer adopts or approves the proceedings authorizing the issuance of refunding bonds, are rated as to investment quality by a nationally recognized investment rating firm not less than "AAA" or its equivalent; (iii) noncallable obligations of a state or an agency or a county, municipality, or other political subdivision of a state that have been refunded and that, on the date the governing body of the issuer adopts or approves the proceedings authorizing the issuance of refunding bonds, are rated as to investment quality by a nationally recognized investment rating firm not less than "AAA" or its equivalent; or (iv) any additional securities and obligations hereafter authorized by the laws of the State of Texas as eligible for use to accomplish the discharge of obligations such as the Bonds.

V. The term *Gross Revenues* for any period means all revenue during such period in respect or on account of the operation or ownership of the System, *excluding* refundable meter deposits, restricted gifts, grants in aid of construction, any amounts payable to the United States as rebate pursuant to the provisions of Section 37, any impact fees charged by the System pursuant to the provisions of Chapter 395, as amended, Local Government Code, payments received pursuant to the CPS Contract together with earnings and interest thereon, and earnings and income derived from the investment or deposit of money in the Construction Fund and, until the Reserve Fund contains the Required Reserve Amount, the Reserve Fund, *but including*, earnings and income derived from the investment or deposit of money in the Bond Fund, the Reserve Fund after it contains the Required Reserve Amount, and any earnings and income from any special fund or account created and established for the payment or security of the Senior Lien Obligations, the Junior Lien Obligations, the Bonds, the Subordinate Lien Obligations, or Inferior Lien Obligations, unless the ordinance which authorizes the issuance of any such obligations specifically provides that any such earnings and income are to be deposited to another fund or account other than the System Fund.

W. The term *Holder or Holders* shall mean the registered owner, whose name appears in the Security Register, for any Bond.

X. The term *Inferior Lien Obligations* means (i) any bonds, notes, warrants, certificates of obligation, or other Debt hereafter issued by the City that are payable from and equally and ratably secured by a lien on and pledge of the Net Revenues that is subordinate and inferior to the pledge thereof securing payment of the currently outstanding Senior Lien Obligations, Junior Lien Obligations, and Subordinate Lien Obligations or any Additional Senior Lien Obligations, Additional Junior Lien Obligations, or

Additional Subordinate Lien Obligations hereafter issued by the City, (ii) any obligations that are issued subject to the limitations in Section 1502.052, as amended, Texas Government Code, and (iii) obligations hereafter issued to refund any of the foregoing if issued in a manner that provides that the refunding bonds are payable from and equally and ratably secured, in whole or in part, by an inferior lien on and pledge of the Net Revenues as determined by the City Council in accordance with applicable law.

Y. The term *Interest Payment Date* shall mean the date semiannual interest is payable on the Bonds, being May 15 and November 15 of each year, commencing May 15, 2021, while any of the Bonds remain Outstanding.

Z. The term *Junior Lien Obligations* shall mean the Previously Issued Junior Lien Obligations, the Junior Lien Obligations–No Reserve Fund, and any Additional Junior Lien Obligations (whether issued as Junior Lien Obligations–No Reserve Fund or Reserve Fund-Secured Junior Lien Obligations) hereafter issued by the City or bonds issued to refund any of the foregoing (as determined within the sole discretion of the City Council in accordance with applicable law) if issued in a manner so as to be payable from and equally and ratably secured by a junior lien on and pledge of the Net Revenues of the System.

AA. The term *Junior Lien Obligations–No Reserve Fund* shall mean the

(1) "City of San Antonio, Texas Water System Junior Lien Revenue Refunding Bonds, Series 2012 (No Reserve Fund)", dated April 1, 2012, in the original principal amount of $31,890,000;

(2) "City of San Antonio, Texas Water System Junior Lien Revenue Refunding Bonds, Series 2013B (No Reserve Fund)", dated May 1, 2013, in the original principal amount of $82,855,000;

(3) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2013E (No Reserve Fund)", dated October 1, 2013, in the original principal amount of $79,350,000;

(4) "City of San Antonio, Texas Water System Variable Rate Junior Lien Revenue and Refunding Bonds, Series 2013F (No Reserve Fund)", dated October 1, 2013, in the original principal amount of $100,000,000;

(5) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2014A (No Reserve Fund)", dated April 1, 2014, in the original principal amount of $103,930,000;

(6) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2014B (No Reserve Fund)", dated April 1, 2014, in the original principal amount of $100,000,000;

(7) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2015B (No Reserve Fund)", dated February 1, 2015, in the original principal amount of $303,235,000;

(8) "City of San Antonio, Texas Water System Junior Lien Revenue Refunding Bonds, Series 2016A (No Reserve Fund)", dated January 1, 2016, in the original principal amount of $173,565,000;

(9) "City of San Antonio, Texas Water System Junior Lien Revenue Refunding Bonds, Taxable Series 2016B (No Reserve Fund)", dated January 1, 2016, in the original principal amount of $42,775,000;

(10) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2016C (No Reserve Fund)", dated October 1, 2016, in the original principal amount of $305,065,000;

(11) "City of San Antonio, Texas Water System Junior Lien Revenue Refunding Bonds, Series 2017A (No Reserve Fund)", dated January 1, 2017, in the original principal amount of $90,915,000;

(12) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2018A (No Reserve Fund)", dated May 1, 2018, in the original principal amount of $208,825,000;

(13) "City of San Antonio, Texas Water System Variable Rate Junior Lien Revenue Bonds, Series 2019A (No Reserve Fund)", dated January 1, 2019, in the original principal amount of $166,480,000;

(14) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2019C (No Reserve Fund)", dated October 1, 2019, in the original principal amount of $82,565,000;

(15) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2020A (No Reserve Fund)", dated January 1, 2020, in the original principal amount of $276,815,000;

(16) Upon issuance, the Bonds; and

any Additional Junior Lien Obligations hereafter issued that are not additionally secured by a lien on and pledge of the Reserve Fund.

BB. The term *Maintenance and Operating Expenses* shall mean all current expenses of operating and maintaining the System not paid from the proceeds of any Debt, *including* (1) the cost of all salaries, labor, materials, repairs, and extensions necessary to render efficient service, *but only if*, in the case of repairs and extensions, that are, in the judgment of the Board (reasonably and fairly exercised), necessary to maintain operation of the System and render adequate service to the City and the inhabitants thereof and other customers of the System, or are necessary to meet some physical accident or condition which would otherwise impair the payment of Debt, (2) payments to pension, retirement, health, hospitalization, and other employee benefit funds for employees of the Board engaged in the operation or maintenance of the System, (3) payments under contracts for the purchase of water supply, treatment of sewage, or other materials, goods, or services for the System to the extent authorized by law and the provisions of such contract, (4) payments to auditors, attorneys, and other consultants incurred in complying with the obligations of the City or the Board hereunder, (5) the payments made on or in respect of obtaining and maintaining any Credit Facility, and (6) any legal liability of the City or the Board arising out of the operation, maintenance, or condition of the System, *but excluding* any allowance for depreciation, property retirement, depletion, obsolescence, and other items not requiring an outlay of cash and any interest on the Bonds or any Debt.

CC. The term *Net Revenues* shall mean Gross Revenues of the System, with respect to any period, after deducting the System's Maintenance and Operating Expenses during such period.

DD. The term *Ordinance* shall mean this ordinance adopted by the City Council on June 25, 2020.

EE. The term *Outstanding*, when used in this Ordinance with respect to Bonds shall mean as of the date of determination, all Bonds issued and delivered under this Ordinance, except:

(1) those Bonds canceled by the Paying Agent/Registrar or delivered to the Paying Agent/Registrar for cancellation;

(2) those Bonds for which payment has been duly provided by the City in accordance with the provisions of Section 39 of this Ordinance by the irrevocable deposit with the Paying Agent/Registrar, or an authorized escrow agent, of money or Government Obligations, or both, in the amount necessary to fully pay the principal of, premium, if any, and interest thereon to maturity or redemption, as the case may be, provided that, if such Bonds are to be redeemed, notice of redemption thereof shall have been duly given pursuant to this Ordinance or irrevocably provided to be given to the satisfaction of the Paying Agent/Registrar, or waived; and

(3) those Bonds that have been mutilated, destroyed, lost, or stolen and for which replacement Bonds have been registered and delivered as provided in Section 32 of this Ordinance.

FF. The term *Pledged Revenues* means (1) the Net Revenues, plus (2) any additional revenues, income, receipts, or other resources, including, without limitation, any grants, donations, or income received or to be received from the United States Government, or any other public or private source, whether pursuant to an agreement or otherwise, which hereafter are pledged by the City to the payment of the Senior Lien Obligations, and excluding those revenues excluded from Gross Revenues.

GG. The term *Previously Issued Junior Lien Obligations* shall mean (i) the outstanding and unpaid obligations of the City that are payable solely from and equally and ratably secured by a junior and inferior lien on and pledge of the Net Revenues of the System, identified as follows:

(1) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2009A", dated November 1, 2009, in the original principal amount of $35,000,000;

(2) "City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2011", dated May 15, 2011, in the original principal amount of $24,550,000;

(3) "City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2011A", dated May 15, 2011, in the original principal amount of $18,095,000;

(4) "City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2012", dated August 1, 2012, in the original principal amount of $19,630,000;

(5) "City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2013A", dated April 1, 2013, in the original principal amount of $50,000,000;

(6) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2013D”, dated October 1, 2013, in the original principal amount of $60,100,000;

(7) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2013C”, dated November 1, 2013, in the original principal amount of $26,370,000;

(8) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2014C”, dated May 15, 2014, in the original principal amount of $38,260,000;

(9) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2014D”, dated May 15, 2014, in the original principal amount of $22,400,000;

(10) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2015A”, dated November 15, 2014, in the original principal amount of $75,920,000;

(11) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2016D”, dated December 1, 2016, in the original principal amount of $12,500,000;

(12) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2016E”, dated December 1, 2016, in the original principal amount of $14,175,000;

(13) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2018B”, dated April 1, 2018, in the original principal amount of $10,500,000;

(14) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2019B, dated September 1, 2019 in the original principal amount of $30,765,000; and

(15) “City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020B, dated February 1, 2020 in the original principal amount of $25,285,000;

and (ii) obligations hereafter issued to refund any of the foregoing if issued in a manner so as to be payable from and equally and ratably secured by a junior and inferior lien on and pledge of the Net Revenues of the System as determined by the City Council in accordance with any applicable law.

HH. The term *Prudent Utility Practice* shall mean any of the practices, methods, and acts, in the exercise of reasonable judgment, in the light of the facts, including but not limited to the practices, methods, and acts engaged in or previously approved by a significant portion of the public utility industry, known at the time the decision was made, that would have been expected to accomplish the desired result at the lowest reasonable cost consistent with reliability, safety, and expedition. It is recognized that Prudent Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather is a spectrum of possible practices, methods, or acts which could have been expected to accomplish the desired result at the lowest reasonable cost consistent with reliability, safety, and expedition. In the case of any facility included in the System which is operated in common with one or more other entities, the term *Prudent Utility Practice*, as applied to such facility, shall have the meaning set forth in the agreement governing the operation of such facility.

II. The term *Purchaser* shall mean the initial purchaser or purchasers of the Bonds named in Section 33 of this Ordinance.

JJ. The term *Rating Agency* shall mean any nationally recognized securities rating agency which has assigned a rating to the Senior Lien Obligations.

KK. The term *Required Reserve Amount* shall mean the amount required to be deposited and maintained in the Reserve Fund under the respective City ordinances authorizing the issuance of each series of Reserve Fund–Secured Junior Lien Obligations.

LL. The term *Required Reserve Fund Deposits* shall mean the monthly deposits, if any, required to be deposited and maintained in the Reserve Fund under the respective City ordinances authorizing the issuance of each series of Reserve Fund–Secured Junior Lien Obligations.

MM. The term *Reserve Fund-Secured Junior Lien Obligations* shall mean the Previously Issued Junior Lien Obligations and any Additional Junior Lien Obligations hereafter issued that are secured by a parity lien on and pledge of the Reserve Fund and specifically excluding the Junior Lien Obligations–No Reserve Fund.

NN. The term *Reserve Fund* shall mean the special fund of the City known as the "City of San Antonio, Waterworks and Sewer System Junior Lien Bond Reserve Fund" established and maintained pursuant to the terms and provisions of the respective City ordinances authorizing the issuance of each series of Reserve Fund-Secured Junior Lien Obligations.

OO. The term *Senior Lien Obligations* shall mean (i) the outstanding and unpaid obligations of the City that are payable solely from and equally and ratably secured by a prior and first lien on and pledge of the Pledged Revenues of the System, identified as follows:

(1) "City of San Antonio, Texas Water System Revenue Bonds, Taxable Series 2009B (Direct Subsidy–Build America Bonds)", dated November 1, 2009, in the original principal amount of $102,750,000;

(2) "City of San Antonio, Texas Water System Revenue Bonds, Taxable Series 2010B (Direct Subsidy–Build America Bonds)", dated November 15, 2010, in the original principal amount of $110,000,000;

(3) "City of San Antonio, Texas Water System Revenue and Refunding Bonds, Series 2011", dated March 15, 2011, in the original principal amount of $46,555,000;

(6) "City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 2012", dated February 1, 2012, in the original principal amount of $225,255,000; and

(7) "City of San Antonio, Texas Water System Revenue and Refunding Bonds, Series 2012A", dated September 1, 2012, in the original principal amount of $163,435,000;

and (ii) obligations hereafter issued to refund any of the foregoing if issued in a manner so as to be payable from and equally and ratably secured by a first lien on and pledge of the Net Revenues of the System as determined by the City Council in accordance with any applicable law.

PP. The term *Series 1992 Bonds* shall mean the "City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 1992" originally issued in the aggregate principal amount of $635,925,000 pursuant to Ordinance No. 75686 that are no longer outstanding.

QQ. The term *Special Project* shall mean, to the extent permitted by law, any water, sewer, wastewater reuse, or municipal drainage system property, improvement, or facility declared by the City, upon the recommendation of the Board, not to be part of the System, for which the costs of acquisition, construction, and installation are paid from proceeds of a financing transaction other than the issuance of bonds payable from ad valorem taxes, Pledged Revenues, or Net Revenues and for which all maintenance and operation expenses are payable from sources other than ad valorem taxes, Pledged Revenues, or Net Revenues, but only to the extent that and for so long as all or any part of the revenues or proceeds of which are or will be pledged to secure the payment or repayment of such costs of acquisition, construction, and installation under such financing transaction.

RR. The term *Stated Maturity* shall mean the annual principal payments of the Bonds payable on May 15 of each year, as set forth in Section 2 of this Ordinance.

SS. The term *Subordinate Lien Obligations* shall mean (i) the currently outstanding and unpaid obligations of the City that are payable wholly or in part from a lien on and pledge of the Net Revenues that is subordinate and inferior to the pledge thereof securing payment of the currently outstanding Senior Lien Obligations and the Junior Lien Obligations or any Additional Senior Lien Obligations or Additional Junior Lien Obligations, all as further provided in Section 21 of the Ordinance, identified as follows:

(1) "City of San Antonio, Texas Water System Commercial Paper Notes, Series A" and "City of San Antonio, Texas Water System Commercial Paper Notes, Series B", authorized in the aggregate principal amount of $500,000,000, and including the currently outstanding Commercial Paper and Loan Notes (each as defined in the ordinance authorizing the issuance of such series of Commercial Paper);

and (ii) obligations hereafter issued to refund any of the foregoing if issued in a manner that provides that the refunding bonds are payable from and equally and ratably secured, in whole or in part, by a subordinate and inferior lien on and pledge of the Net Revenues as determined by the City Council in accordance with applicable law.

TT. The term *System* shall mean all properties, facilities, and plants currently owned, operated, and maintained by the City and/or the Board for the supply, treatment, and transmission and distribution of treated potable water, chilled water, and steam, for the collection and treatment of wastewater, and for water reuse, together with all future extensions, improvements, purchases, repairs, replacements and additions thereto, whether situated within or without the limits of the City, all water (in any form) owned by the City, and any other projects and programs of the Board; provided, however, that the City expressly retains the right to incorporate (1) a stormwater system as provided by the provisions of Section 552.041 through 552.054, as amended, Local Government Code, or other similar law, and (2) any other related system as provided by the laws of the State of Texas as a part of the System. The System shall not include any Special Project or any water or water-related properties and facilities owned by the City as part of its electric and gas systems.

SECTION 10: Pledge of Net Revenues.

A. The City hereby covenants and agrees that the Net Revenues of the System are, subject to the prior lien and pledge of such Pledged Revenues securing the payment of the currently outstanding Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City, hereby irrevocably pledged to the payment and security of the currently outstanding Junior Lien Obligations including the establishment and maintenance of the special funds or accounts created and established for the payment and security thereof, all as hereinafter provided; and it is hereby ordained that the currently outstanding Junior Lien Obligations, and the interest thereon, shall constitute a lien on and pledge of the Net Revenues of the System and be valid and binding without any physical delivery thereof or further act by the City, and the lien created hereby on the Net Revenues of the System for the payment and security of the currently outstanding Junior Lien Obligations shall be junior and inferior to the lien on and pledge of the Net Revenues securing payment of the currently outstanding Senior Lien Obligations or any Additional Senior Lien Obligations hereafter issued by the City, but prior in right and claim as to any other indebtedness (including the currently outstanding Subordinate Lien Obligations and any Additional Subordinate Lien Obligations and any Inferior Lien Obligations hereafter issued by the City), liability, or obligation of the City or the System.

B. Chapter 1208, as amended, Texas Government Code, applies to the issuance of the Bonds and the pledge of the Net Revenues granted by the City under this section, and such pledge is therefore valid, effective and perfected. If Texas law is amended at any time while the Bonds are Outstanding such that the pledge of the Net Revenues granted by the City under this Section is to be subject to the filing requirements of Chapter 9, Business & Commerce Code, then in order to preserve to the registered owners of the Bonds the perfection of the security interest in said pledge, the City agrees to take such measures as it determines are reasonable and necessary under Texas law to comply with the applicable provisions of Chapter 9, Business & Commerce Code and enable a filing to perfect the security interest in said pledge to occur.

SECTION 11: Rates and Charges. For the benefit of the Holders of the Bonds and in addition to all provisions and covenants in the laws of the State of Texas and in this Ordinance, the City hereby expressly stipulates and agrees, while any of the currently outstanding Junior Lien Obligations are Outstanding, to establish and maintain rates and charges for facilities and services afforded by the System that are reasonably expected, on the basis of available information and experience and with due allowance for contingencies, to produce Gross Revenues in each Fiscal Year sufficient:

A. To pay all Maintenance and Operating Expenses, or any expenses required by statute to be a first claim on and charge against the Gross Revenues of the System;

B. To produce Pledged Revenues, together with any other lawfully available funds, sufficient to satisfy the rate covenant contained in the ordinances authorizing the issuance of the currently outstanding Senior Lien Obligations and to pay the principal of and interest on the currently outstanding Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City and the amounts required to be deposited in any reserve or contingency fund or account created for the payment and security of the currently outstanding Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City, and any other obligations or evidences of indebtedness issued or incurred that are payable from and secured solely by a prior and first lien on an pledge of the Net Revenues of the System;

C. To produce Net Revenues, together with any other lawfully available funds, to pay the principal of and interest on the currently outstanding Junior Lien Obligations as the same become due and payable and to deposit the amounts required to be deposited in any special fund or account created and established for the payment and security of the Additional Junior Lien Obligations hereafter issued by the City, and any other obligations or evidences of indebtedness issued or incurred that are payable from and secured solely by a junior lien on and pledge of the Net Revenues of the System;

D. To produce Net Revenues, together with any other lawfully available funds, to pay the principal of and interest on the currently outstanding Subordinate Lien Obligations and any Additional Subordinate Lien Obligations hereafter issued by the City as the same become due and payable and to deposit the amounts required to be deposited in any special fund or account created and established for the payment and security of the currently outstanding Subordinate Lien Obligations and any Additional

Subordinate Lien Obligations, and any other obligations or evidences of indebtedness issued or incurred that are payable from and secured, in whole or in part, by a subordinate lien on and pledge of the Net Revenues of the System;

E. To produce Net Revenues, together with any other lawfully available funds, to pay the principal of and interest on any Inferior Lien Obligations hereafter issued by the City as the same become due and payable and to deposit the amounts required to be deposited in any special fund or account created and established for the payment and security of any Inferior Lien Obligations hereafter issued by the City, and any other obligations or evidences of indebtedness issued or incurred that are payable from and secured by a lien on and pledge of the Net Revenues of the System in accordance with applicable law;

F. To produce Net Revenues, together with any other lawfully available funds, to fund the transfers as permitted by the provisions of Section 15 of this Ordinance; and

G. To pay, together with any other lawfully available funds, any other legally incurred Debt payable from the Net Revenues of the System and/or secured by a lien on the System.

SECTION 12: System Fund. The City hereby covenants, agrees, and reaffirms that the Gross Revenues of the System shall be deposited, as collected and received, into a separate Fund or account (previously created, established, and to be maintained with the Depository) known as the "City of San Antonio, Texas Water System Revenue Fund" (the *System Fund*) and that the Gross Revenues of the System shall be kept separate and apart from all other funds of the City. All Gross Revenues deposited into the System Fund shall be pledged and appropriated to the extent required for the following uses and in the order of priority shown:

- FIRST: to the payment of all necessary and reasonable Maintenance and Operating Expenses as defined herein or required by statute, including, but not limited to, Chapter 1502, as amended, Texas Government Code (formerly Texas Revised Civil Statutes Annotated Article 1113, as amended), to be a first charge on and claim against the Gross Revenues, including a two-month reserve amount based upon the budgeted amount of Maintenance and Operating Expenses for the current Fiscal Year, which amount shall be retained in the System Fund.

- SECOND: to the payment of the amounts required to be deposited into the special funds and accounts created and established for the payment, security and benefit of the currently outstanding Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City.

- THIRD: to the payment of the amounts required to be deposited into the special funds and accounts created and established for the payment, security and benefit of the currently outstanding Junior Lien Obligations and any Additional Junior Lien Obligations hereafter issued by the City.

- FOURTH: to the payment of the amounts that must be deposited in any special funds and accounts created and established for the payment, security and benefit of the currently outstanding Subordinate Lien Obligations and any Additional Subordinate Lien Obligations hereafter issued by the City.

- FIFTH: to the payment of the amounts that must be deposited in any special funds and accounts created and established for the payment, security, and benefit of any Inferior Lien Obligations hereafter issued by the City.

- SIXTH: to the payment of the amounts to be transferred to the City's General Fund as provided in Section 15 hereof and into the Renewal and Replacement Fund created and established by Section 16 hereof.

Any Net Revenues remaining in the System Fund after satisfying the foregoing payments, or making adequate and sufficient provision for the payment thereof, may be appropriated and used for any other City purpose now or hereafter permitted by law and the ordinances authorizing the issuance of the currently outstanding Senior Lien Obligations.

SECTION 13: Bond Fund; Excess Bond Proceeds. For purposes of providing funds to pay the principal of and interest on the currently outstanding Junior Lien Obligations as the same become due and payable, the City agrees to maintain, at the Depository, a separate and special Fund or account to be created and known as the "City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020C Interest and Sinking Fund" (the *Bond Fund*). The City covenants that there shall be deposited by the Designated Financial Officer into the Bond Fund prior to each principal and Interest Payment Date from the available Net Revenues an amount equal to one hundred percent (100%) of the amount required to fully pay the interest on and the principal of the currently outstanding Junior Lien Obligations then falling due and payable, such deposits to pay maturing principal and accrued interest on the currently outstanding Junior Lien Obligations to be made in substantially equal monthly installments on or before the tenth day of each month, beginning on or before the tenth day of the month next following the delivery of the Bonds to the Purchaser. If the Net Revenues in any month are insufficient to make the required payments into the Bond Fund, then the amount of any deficiency in such payment shall be added to the amount otherwise required to be paid into the Bond Fund in the next month.

The required monthly deposits to the Bond Fund for the payment of principal of and interest on the currently outstanding Junior Lien Obligations shall continue to be made as hereinabove provided until such time as (i) the total amount on deposit in the Bond Fund and Reserve Fund is equal to the amount required to fully pay and discharge all outstanding Junior Lien Obligations (principal and interest) or, (ii) the Junior Lien Obligations are no longer Outstanding.

Accrued interest, if any, received from the Purchaser shall be taken into consideration and reduce the amount of the monthly deposits hereinabove required to be deposited into the Bond Fund from the Net Revenues of the System. Additionally, any proceeds of the Bonds, and investment income thereon, not expended for authorized purposes shall be deposited into the Bond Fund and shall be taken into consideration and reduce the amount of monthly deposits required to be deposited into the Bond Fund from the Net Revenues of the System.

SECTION 14: Reserve Fund. For the benefit of the Reserve Fund-Secured Junior Lien Obligations and not the Junior Lien Obligations–No Reserve Fund (which includes the Bonds), the City has heretofore established and now maintains the Reserve Fund. The Reserve Fund is maintained pursuant to the provisions of the respective City ordinances authorizing the issuance of the Reserve Fund-Secured Junior Lien Obligations. Though the Reserve Fund does not secure the Bonds or the other Junior Lien Obligations–No Reserve Fund, the City hereby acknowledges and affirms its rights, duties, and obligations with respect to the Reserve Fund included in the respective City ordinances authorizing the issuance of the Reserve Fund-Secured Junior Lien Obligations.

The City hereby acknowledges, reserves and confirms its right to issue Additional Junior Lien Obligations as Junior Lien Obligations–No Reserve Fund, being obligations not benefited by the additional pledge of the Reserve Fund, provided that such Additional Junior Lien Obligations issued as Junior Lien Obligations–No Reserve Fund are not sold to the Texas Water Development Board. In such instance, those Additional Junior Lien Obligations issued as Junior Lien Obligations–No Reserve Fund shall be (i) designated as such by including the parenthetical "(No Reserve Fund)" to the style of the subject obligations in all related transaction documentation (including, but not limited to, the City ordinance authorizing the issuance of such Additional Junior Lien Obligations and the Form of Bond therefor) to clearly distinguish such Additional Junior Lien Obligations from those Junior Lien Obligations that are Reserve Fund–Secured Junior Lien Obligations and (ii) excluded from all calculations identified in and requirements of this Section and other applicable sections of any ordinance authorizing the issuance of Additional Junior Lien Obligations concerning amounts at any time required to be deposited to and held in the Reserve Fund. Any disclosure or similar document used to market and sell Additional Junior Lien Obligations issued as Junior Lien Obligations–No Reserve Fund shall clearly indicate that the holders of such Additional Junior Lien Obligations shall have no right to or claim on the funds at any time held in the Reserve Fund.

SECTION 15: Payments to City General Fund. The Designated Financial Officer of the Board shall transfer no later than the last business day of each month, an amount of money calculated, subject to the second paragraph of Section 16, not to exceed 5% (or such lesser amount as may be determined from time to time by the City Council) of the Gross Revenues (after making each of the payments required by the provisions of subparagraphs First through Fifth of Section 12 hereof) for the preceding month to be utilized by the City in the manner permitted by the provisions of Chapter 1502, as amended, Texas Government Code (formerly Texas Revised Civil Statutes Annotated Article 1113a, as amended). The amount so transferred shall be net of all amounts owed by the City to the Board for the utility services described in Section 25E hereof; provided, however, that the Board shall provide the City with a sufficiently detailed statement of charges for such utility services to permit the City to allocate the charges for such utility services to the appropriate office, division, or department of the City.

To the extent that the available Net Revenues in any month are insufficient for the Board to make all or part of the transfer required by the preceding paragraph, the Board shall make up such shortfall (i) in the next month in which available Net Revenues exceed the amounts required to make the transfer to the City pursuant to the preceding paragraph and the *pari passu* payment to the Renewal and Replacement Fund under Section 16 or (ii) to the extent such shortfall has not been made up by the last month of the Fiscal Year, solely from any surplus funds deposited into the Renewal and Replacement Fund for such Fiscal Year. The Board's obligation to make up any shortfall in a Fiscal Year shall not carry over to a subsequent Fiscal Year.

SECTION 16: Renewal and Replacement Fund. There has previously been created and established and there shall be maintained on the books of the Board, and accounted for separate and apart from all other funds of the City and the Board, a separate fund to be entitled the "City of San Antonio, Texas Water System Renewal and Replacement Fund" (the *Renewal and Replacement Fund*). The Renewal and Replacement Fund shall be used for the purpose of (1) paying the costs of improvements, enlargements, extensions, additions, replacements, or other capital expenditures related to the System, or (2) paying the costs of unexpected or extraordinary repairs or replacements of the System for which System funds are not available, or (3) paying unexpected or extraordinary expenses of operation and maintenance of the System for which System funds are not otherwise available, or (4) depositing any funds received by the City pursuant to the CPS Contract, and such funds, including any interest or income thereon, shall be maintained in a separate, segregated account of the Renewal and Replacement Fund and shall only be used to pay Maintenance and Operating Expenses of the water reuse facilities of the System or the debt service requirements on any obligations incurred as permitted by the CPS Contract and in no event shall any such amount, including interest and income thereon, be transferred to the general fund of the City except as permitted by the CPS Contract, or (5) paying bonds or other obligations of the System for which other System revenues are not available, or (6) in the last month of any Fiscal Year to make up any shortfall as required by Section 15B, or (7) for any other lawful purpose in support of the System. The Renewal and Replacement Fund shall be maintained at the Depository.

Deposits to the Renewal and Replacement Fund shall be *pari passu* with the gross amount payable to the City pursuant to Section 15 (prior to the deduction of any charges for utility services provided pursuant to Section 25E) until the full amount payable to the City under such Section has been paid. That is, such deposits to the Renewal and Replacement Fund shall be made equally and ratably, without preference, and on a dollar-for-dollar basis with the gross amount payable to the City pursuant to Section 15, prior to the deduction of any charges for services, until the full amount to be paid to the City in a Fiscal Year under Section 15 has been transferred to the City's General Fund. Thereafter, all surplus Net Revenues shall be deposited to the Renewal and Replacement Fund.

SECTION 17: Deficiencies – Excess Net Revenues.

A. If on any occasion there shall not be sufficient Net Revenues of the System (after making all payments pertaining to the currently outstanding Senior Lien Obligations or any Additional Senior Lien Obligations hereafter issued by the City) to make the required deposits into the Bond Fund and the Reserve Fund, then such deficiency shall be cured as soon as possible from the next available unallocated Net Revenues of the System, or from any other sources available for such purpose, and such payments shall be in addition to the amounts required to be paid into these Funds or accounts during such month or months.

B. Subject to making the required deposits to the Bond Fund and the Reserve Fund when and as required by this Ordinance, or any ordinance authorizing the issuance of any Additional Junior Lien Obligations (as applicable), or the payments required by the provisions of the ordinances authorizing the issuance of the currently outstanding Subordinate Lien Obligations and any Additional Subordinate Lien Obligations hereafter issued by the City and any Inferior Lien Obligations hereafter issued by the City, the excess Net Revenues of the System may be used by the City for any lawful purpose in accordance with the provisions of the ordinances authorizing the issuance of the currently outstanding Senior Lien Obligations.

SECTION 18: Payment of Bonds. While any of the Bonds are outstanding, any Designated Financial Officer or Authorized Official shall cause to be transferred to the Paying Agent/Registrar therefor, from funds on deposit in the Bond Fund, and, if necessary, in the Reserve Fund, amounts sufficient to fully pay and discharge promptly each installment of interest on and principal of the Bonds as such installment accrues or matures; such transfer of funds must be made in such manner as will cause immediately available funds to be deposited with the Paying Agent/Registrar for the Bonds at the close of the business day next preceding the date a debt service payment is due on the Bonds.

SECTION 21: Issuance of Additional Senior Lien Obligations, Additional Junior Lien Obligations, Additional Subordinate Lien Obligations, and Inferior Lien Obligations. The City hereby expressly reserves the right to hereafter issue bonds, notes, warrants, certificates of obligation, or similar obligations, payable, wholly or in part, as appropriate, from and secured by a pledge of and lien on the Net Revenues of the System with the following priorities, without limitation as to principal amount, but subject to any terms, conditions, or restrictions applicable thereto under existing ordinances, laws, or otherwise:

A. Additional Senior Lien Obligations payable from and equally and ratably secured by a first and prior lien on and pledge of the Pledged Revenues of the System upon satisfying each of the conditions precedent contained in the ordinances authorizing the issuance of the currently outstanding Senior Lien Obligations;

B. Additional Junior Lien Obligations (except for Additional Junior Lien Obligations that are insured by a municipal bond insurance policy, which need not satisfy the provisions of paragraph B(2) or B(3) hereof), payable from and equally and ratably secured by a junior and inferior lien on and pledge of the Net Revenues of the System, upon satisfying each of the following conditions precedent:

(1) the Chief Financial Officer of the City (or other official of the City having primary responsibility for the fiscal affairs of the City) shall have executed a certificate stating that (i) except for a refunding to cure a default, or the deposit of a portion of the proceeds of any Additional Junior Lien Obligations to satisfy the City's obligations under this Ordinance, the City is not then in default as to any covenant, obligation, or agreement contained in any ordinance or other proceedings relating to any obligations of the City payable from and secured by a lien on and pledge of the Net Revenues of the System and (ii) all payments into all special funds or accounts created and established for the payment and security of all outstanding obligations payable from and secured by a lien on and pledge of the Net Revenues of the System have been duly made and that the amounts on deposit in such special funds or accounts are the amounts then required to be deposited therein;

(2) with respect to Additional Junior Lien Obligations sold to the Texas Water Development Board (the *TWDB*) that are not insured by a municipal bond insurance policy, the City has secured from a Certified Public Accountant a certificate or opinion to the effect that, according to the books and records of the City, the Net Revenues of the System, for the preceding Fiscal Year or for any 12 consecutive months out of the 18 months immediately preceding the month the ordinance authorizing the Additional Junior Lien Obligations is adopted, are at least equal to one and one-fourth (1-1/4) times the average annual requirement for the payment of principal of and interest on all outstanding Junior Lien Obligations after giving effect to the Additional Junior Lien Obligations then proposed. In making a determination of the Net Revenues, the Accountant may take into consideration a change in the rates and charges for services and facilities afforded by the System that became effective at least sixty (60) days prior to the last day of the period for which Net Revenues are to be determined and, for purposes of satisfying the above Net Revenues test, make a pro forma determination of the Net Revenues for the period of time covered by his certification or opinion based on such change in rates and charges being in effect for the entire period covered by the Accountant's certificate or opinion;

(3) with respect to Additional Junior Lien Obligations sold to any other entity other than the TWDB and that are not insured by a municipal bond insurance policy, the City has secured from a Certified Public Accountant a certificate or opinion to the effect that, according to the books and records of the City, the Net Revenues of the System, for the preceding Fiscal Year or for any 12 consecutive months out of the 18 months immediately preceding the month the ordinance authorizing the Additional Junior Lien Obligations is adopted, are at least equal to the average annual requirement for the payment of principal of and interest on all outstanding Junior Lien Obligations after giving effect to the Additional Junior Lien Obligations then proposed. In making a determination of the Net Revenues, the Accountant may take into consideration a change in the rates and charges for services and facilities afforded by the System that became effective at least sixty (60) days prior to the last day of the period for which Net Revenues are to be determined and, for purposes of satisfying the above Net Revenues test, make a pro forma determination of the Net Revenues for the period of time covered by his certification or opinion based on such change in rates and charges being in effect for the entire period covered by the Accountant's certificate or opinion;

(4) the ordinance authorizing the issuance of the Additional Junior Lien Obligations provides for deposits to be made to the Bond Fund in amounts sufficient to pay the principal of and interest on such Additional Junior Lien Obligations as the same mature; and

(5) the ordinance authorizing the issuance of the Additional Junior Lien Obligations that are Reserved Fund–Secured Junior Lien Obligations provides that the amount to be accumulated and maintained in the Reserve Fund shall be in an amount equal to not less than the Average Annual Debt Service Requirements for the payment of the Junior Lien Obligations then outstanding, inclusive of the changes in the amount resulting from the issuance of the proposed Additional Junior Lien Obligations that are Reserved Fund–Secured Junior Lien Obligations, and provides that any additional amount to be maintained in the Reserve Fund shall be accumulated within sixty (60) months from the date the Additional Junior Lien Obligations that are Reserved Fund–Secured Junior Lien Obligations are delivered; provided, however, that no such requirement as it relates to additional amounts to be deposited to the Reserve Fund shall be applicable to, or serve as a condition to the issuance of, Additional Junior Lien Obligations that are or will be Junior Lien Obligations–No Reserve Fund.

C. Additional Subordinate Lien Obligations secured by a subordinate and inferior lien on and pledge of the Net Revenues upon satisfying each of the conditions precedent contained in the ordinances authorizing the issuance of the currently outstanding Senior Lien Obligations, outstanding Subordinate Lien Obligations, or this Ordinance, as appropriate.

D. Inferior Lien Obligations secured by an inferior lien on and pledge of the Net Revenues of the System upon satisfying each of the conditions precedent contained in the ordinances authorizing the issuance of the currently outstanding Senior Lien Obligations or this Ordinance.

SECTION 22: Issuance of Special Project Obligations. Nothing in this Ordinance shall be construed to deny the City the right and it shall retain the right to issue Special Project obligations, provided, however, the City will not issue Special Project obligations unless the City concludes, upon recommendation of the Board, that (i) the plan for developing the Special Project is consistent with sound planning, (ii) the Special Project would not materially and adversely interfere with the operation of the System, (iii) the Special Project can be economically and efficiently operated and maintained, and (iv) the Special Project can be economically and efficiently utilized by the Board to meet water, wastewater, water reuse, or stormwater drainage requirements and the cost of such will be reasonable.

SECTION 23: Maintenance of System – Insurance. The City covenants and agrees that while the Junior Lien Obligations remain outstanding the Board will maintain and operate the System in accordance with Prudent Utility Practice and will maintain casualty and other insurance on the properties of the System and its operations of a kind and in such amounts customarily carried by municipal corporations in the State of Texas engaged in a similar type of business (which may include an adequate program of self-insurance); and that it will faithfully and punctually perform all duties with reference to the System required by the laws of the State of Texas. All money received from losses under such insurance policies, other than public liability policies, shall be retained for the benefit of the Holders of the Bonds until and unless the proceeds are paid out in making good the loss or damage in respect of which such proceeds are received, either by replacing the property destroyed or repairing the property damaged, and adequate provision for making good such loss or damage must be made within ninety (90) days after the date of loss. The payment of premiums for all insurance policies required under the provisions hereof and the costs associated with the maintenance of any self-insurance program shall be considered Maintenance and Operating Expenses. Nothing in this Ordinance shall be construed as requiring the City or the Board to expend any funds which are derived from sources other than the operation of the System, but nothing herein shall be construed as preventing the City or the Board from doing so.

SECTION 24: Records and Accounts – Annual Audit. The City covenants, agrees, and affirms its covenants that so long as any of the Bonds remain outstanding, it will keep and maintain separate and complete records and accounts pertaining to the operations of the System in which complete and correct entries shall be made of all transactions relating thereto, as provided by Chapter 1502, as amended, Texas Government Code, or other applicable law. The Holders of the Bonds or any duly authorized agent or agents of such Holders shall have the right to inspect the System and all properties comprising the same. The City further agrees that following (and in no event later than 120 days after) the close of each Fiscal Year, it will cause an audit of such books and accounts to be made by an independent firm of Certified Public Accountants. Expenses incurred in making the annual audit of the operations of the System are to be regarded as Maintenance and Operating Expenses.

SECTION 25: Special Covenants. The City hereby further covenants that:

A. It has the lawful power to pledge the Net Revenues supporting the Bonds and has lawfully exercised this power under the laws of the State of Texas, including the power existing under Chapters 1371 and 1502 as amended, Texas Government Code, and the City's Home Rule Charter;

B. The Bonds shall be equally and ratably secured by a junior lien on and pledge of the Net Revenues of the System in a manner that one Bond shall have no preference over any other Bond;

C. Other than for the payment of the currently outstanding Senior Lien Obligations, Junior Lien Obligations, and the Subordinate Lien Obligations, the Net Revenues of the System have not in any manner been pledged to the payment of any debt or obligation of the City or of the System;

D. As long as any Bonds, or any interest thereon, remain Outstanding, the City will not sell, lease, or encumber the System or any substantial part thereof (except as provided in Section 21 of this Ordinance) provided that this covenant shall not be construed to prohibit the sale of such machinery, or other properties or equipment which has become obsolete or otherwise unsuited to the efficient operation of the System;

E. No free service (except water provided to the City for municipal fire-fighting purposes and certain stormwater utility service) of the System shall be allowed, and, should the City or any of its agencies or instrumentalities make use of the services and facilities of the System, payment of the reasonable value thereof shall be made, if necessary, by the City pursuant to Section 15; and

F. To the extent that it legally may, the City further covenants and agrees that, so long as any of the Bonds, or any interest thereon, are Outstanding, no franchise shall be granted for the installation or operation of any competing utility systems other than those owned by the City, and the operation of any such systems by anyone other than the City is hereby prohibited.

SECTION 26: Limited Obligations of the City. The Bonds are limited, special obligations of the City payable from and equally and ratably secured solely by a junior lien on and pledge of the Net Revenues of the System, and the Holders thereof shall never have the right to demand payment of the principal or interest on the Bonds from any funds raised or to be raised through taxation by the City.

SECTION 27: Security of Funds. All money on deposit in the Funds or accounts for which this Ordinance makes provision (except any portion thereof as may be at any time properly invested as provided herein) shall be secured in the manner and to the fullest extent required by the laws of Texas for the security of public funds, and money on deposit in such Funds or accounts shall be used only for the purposes permitted by this Ordinance.

SECTION 28: Remedies in Event of Default. In addition to all the rights and remedies provided by the laws of the State of Texas, the City covenants and agrees particularly that in the event the City (a) defaults in the payments to be made to the Bond Fund or Reserve Fund, or (b) defaults in the observance or performance of any other of the covenants, conditions, or obligations set forth in this Ordinance, the Holders of any of the Bonds shall be entitled to seek a writ of mandamus issued by a court of proper jurisdiction compelling and requiring the governing body of the City and other officers of the City to observe and perform any covenant, condition, or obligation prescribed in this Ordinance.

No delay or omission to exercise any right or power accruing upon any default shall impair any such right or power or shall be construed to be a waiver of any such default or acquiescence therein, and every such right and power may be exercised from time to time and as often as may be deemed expedient. The specific remedy herein provided shall be cumulative of all other existing remedies and the specification of such remedy shall not be deemed to be exclusive.

SECTION 40: Ordinance a Contract; Amendments – Outstanding Bonds. The City acknowledges that the covenants and obligations of the City herein contained are a material inducement to the purchase of the Bonds. This Ordinance shall constitute a contract with the Holders from time to time, binding on the City and its successors and assigns, and it shall not be amended or repealed by the City so long as any Bond remains Outstanding except as permitted in this Section. The City may, without the consent of or notice to any Holders, from time to time and at any time, amend this Ordinance in any manner not detrimental to the interests of the Holders, including the curing of any ambiguity, inconsistency, or formal defect or omission herein. In addition, the City may, with the written consent of Holders holding a majority in aggregate principal amount of the Bonds then Outstanding affected thereby, amend, add to, or rescind any of the provisions of this Ordinance; provided that, without the consent of all Holders of Outstanding Bonds, no such amendment, addition, or rescission shall (1) extend the time or times of payment of the principal of and interest on the Bonds, reduce the principal amount thereof or the rate of interest thereon, or in any other way modify the terms of payment of the principal of or interest on the Bonds, (2) give any preference to any Bond over any other Bond, or (3) reduce the aggregate principal amount of Bonds required for consent to any such amendment, addition, or rescission

SECTION 41: Management of System.

A. Pursuant to the authority contained in Chapter 1502, as amended, Texas Government Code (formerly Texas Revised Civil Statutes Annotated Article 1115b, as amended), except as otherwise specifically provided in this Ordinance, the complete management and control of the System during such time as any Debt is outstanding shall be vested in a seven-member board of trustees to be known as the "San Antonio Water System Board of Trustees". Such board is referred to in this Ordinance as the "Board." The Mayor of the City from time to time shall ex-officio be one of the members of the Board, and the other current members of the Board as of the date of passage of this Ordinance are Heriberto "Berto" Guerra, Jr. and Pat Merritt, each currently serving a term ending May 31, 2018 (but continue to serve pursuant to holdover provisions); Patricia Jasso serving a term ending [May 31, 2020]; and Amy Hardberger, Eduardo Parra, and David McGee, each serving terms ending May 31, 2021. Notwithstanding the foregoing, the Members of the Board may be increased to a number greater than seven (7), to include the Mayor of the City as an ex-officio member, as otherwise appointed by the City.

B. Members of the Board must be citizens of the United States and must either reside inside the corporate limits of the City or inside the area served by the System. No person who is related within the second degree of consanguinity or affinity (or as further restricted by the City's Home Rule Charter) to any Member of the Board or any member of the City Council shall be eligible for appointment as a Member of the Board. The term of office of each Member of the Board shall be four (4) years. All terms shall commence on a June 1 and shall terminate on May 31 four years later; provided, however, in the event a replacement for a Member has not been named by the City Council prior to the expiration of such Member's term, such Member shall serve until such Member's successor shall be appointed, and such successor's term shall terminate on May 31st of the year in which such term normally would have terminated if the

City Council had appointed such successor prior to the termination of such Member's term. No person who has served as a Member of the Board for a total of two (2) terms shall be eligible for appointment as a Member of the Board. Any Member who is appointed to the Board to serve out an unexpired portion of another Member's term shall not be considered to have served a term unless the unexpired portion of the term so served is two (2) years or more.

C. Removal of residence from the area served by the System by any Member of the Board shall cause such person to vacate office as a Member of the Board, and any Member of the Board (other than the Mayor of the City) who shall be continuously absent from all meetings of the Board for a period of four (4) consecutive months shall, unless such person has requested and been granted leave of absence by the unanimous vote of the remaining Members of the Board, be considered to have vacated such person's office as a Member of the Board.

D. All vacancies in membership on the Board, whether occasioned by failure or refusal of any person to accept appointment or by resignation, failure to continue to qualify to serve, expiration of term of office, or otherwise, shall be filled by majority vote of all members of the City Council then holding office. Any Member of the Board other than the Mayor of the City may, by a two-thirds (2/3) vote of all members of the City Council then holding office, be removed from office, with or without cause. For purposes of this Section 41, the term *members of the City Council then holding office* shall be the number of persons authorized from time to time by the City's Home Rule Charter to be members of the City Council, whether or not all such positions are filled at any particular time.

E. Except as otherwise specifically provided in this Ordinance, the Board shall have absolute and complete authority and power to control, manage, and operate the System and shall control the expenditure and application of the Gross Revenues of the System pursuant to this Ordinance. In connection with the control, management, and operation of the System and the expenditure and application of the Gross Revenues therefrom, the Board shall be vested with all of the powers of the City with respect thereto, including all powers necessary or appropriate for the performance of all the covenants, undertakings, and agreements of the City contained in this Ordinance, and, with the exception of fixing rates and charges for service rendered by the System, shall have full power and authority to make rules and regulations governing the furnishing of services of the System to customers and for the payment of the same, and for the discontinuance of such services upon failure of customers to pay therefor and, to the extent authorized by law and by this Ordinance, shall have authority to make extensions, improvements, and additions to the System and to acquire by purchase or otherwise properties of every kind in connection therewith. The operational policies of the Board shall parallel those of the City Council insofar as practicable.

F. The Board shall determine the rates, fees, and charges for services rendered and to be rendered by the System, with due consideration being accorded to the terms, covenants, and conditions contained in this Ordinance and the ordinances authorizing the issuance of any Additional Senior Lien Obligations. In the event any such determination reflects a necessity for the adjustment either by an increase or a reduction of such rates, fees, and charges, then the Board shall submit to the City Council a full report of the basis upon which such proposed adjustment is predicated, accompanied by a formal request from the Board for approval and adoption of the rates, fees, and charges recommended by the Board. If the City Council approves the adjustment thus recommended by the Board, it shall pass an appropriate ordinance placing such adjusted rates, fees, and charges in effect; provided, however, that the rates, fees, and charges for services rendered by the System shall never be reduced in such amounts as will impair the performance of any of the covenants contained in this Ordinance or in any ordinance authorizing the issuance of any Additional Senior Lien Obligations.

G. The Mayor, with the concurrence of the City Council, annually shall appoint one of the other Members of the Board as the Chairman of the Board. The Board annually shall elect one of its

Members as Vice-Chairman of the Board and shall appoint a Secretary and an Assistant Secretary, either or both of whom may, but need not be, a Member or Members of the Board. If a Member of the Board is not appointed as Secretary or Assistant Secretary, then an employee or employees of the Board may be so appointed. The Board may adopt rules for the orderly conduct of its meetings. The Board shall manage and conduct the affairs of the System in a manner consistent with practices ordinarily employed by the boards of directors of private utility corporations operating properties of a similar nature and with the same degree of prudence. The Board shall have at least one meeting monthly. All meetings of the Board shall be open to the public in accordance with the requirements of Chapter 551, as amended, Texas Government Code. The Board is authorized to adopt rules of procedure and standards of conduct for persons attending and participating in its meetings and any public hearings conducted by or on behalf of the Board.

H. The Board shall appoint and employ all officers, employees, and professional consultants which it may deem desirable, including, without limitation, a chief executive officer of the System, attorneys, auditors, engineers, architects, and other advisers; provided, however, that the City Attorney shall be the chief legal adviser of the Board. The selection of additional attorneys shall be made in consultation with the City Attorney, but the decision of the Board shall be final. The Board may delegate administrative duties and authority to its employees and consultants. No officer or employee of the Board may be employed who shall be related within the second degree of consanguinity or affinity (or as further restricted by the City's Home Rule Charter) to any Member of the Board or any member of the City Council.

I. The Board shall obtain and keep continually in force an employees' fidelity and indemnity bond ("blanket" form), or its equivalent, written by a solvent and recognized insurer and covering losses to the amount of not less than One Hundred Thousand Dollars ($100,000.00).

J. The Board shall make such provision for an employee retirement plan or pensions for employees of the Board as it may in its discretion determine. The Board may continue in existence the retirement plans in effect on the date of adoption of the ordinance authorizing the issuance of the Series 1992 Bonds for the Waterworks System, the Wastewater Department of the City, and the Water Reuse Department of the City and may change the same from time to time as it may determine. The title to and ownership of funds set aside in accordance with an employee retirement plan shall be held in trust for the benefit of the members of such pension plan.

K. The Members of the Board, other than the Mayor of the City, shall each receive annual compensation in the amount of $2,500.00 or such additional amount as may be determined from time to time by the City Council. The Members of the Board shall be entitled to payment by the Board of their reasonable and necessary expenses for the discharge of their duties.

L. The Members of the Board shall not be personally liable, either individually or collectively, for any act or omission in the performance of their duties as Members of the Board not willfully fraudulent or in bad faith. The Board may authorize the use of Board funds to provide defense for its Members or its employees for civil actions brought against them for any such acts and may hold such Members and employees harmless from any damages awarded against them in any civil action.

M. The City Manager, or the City Manager's designee, shall be authorized to attend meetings of the Board, and the Board shall provide the City Manager with notice of such meetings in the same manner that such notice is given by the Board to its Members.

N. The Board when expending funds for improvements and materials and supplies shall be governed by the then current provisions of applicable City policy and the laws of the State of Texas relating to notices to bidders, advertisement thereof, requirements as to the taking of sealed bids based upon specifications for such improvements or purchase, the furnishing of surety bonds by contractors, and the manner of letting contracts.

O. The City Council reserves the right to require the Board, at the System's expense and payable from the Renewal and Replacement Fund, to conform its installations in the streets, alleys, and public ways of the City to any changes created by City construction projects; provided, however, such City-ordered relocation of System facilities at the System's expense shall be limited, in any Fiscal Year, to an amount not to exceed 5% of the Board's annual budget for Maintenance and Operating Expenses in such Fiscal Year. Relocation costs exceeding such 5% limitation shall be funded through direct payment of such excess costs by the City, through payment to the Board of such excess cost by the City, or through the issuance of Debt.

P. No Member of the Board, or any officer, agent, or employee of the Board shall have a financial interest, direct or indirect, in any contract with the Board or shall be financially interested, directly or indirectly, in the sale to the Board of any land, materials, supplies, or services except on behalf of the Board as an officer or employee or as permitted by the provisions of Chapter 171, as amended, Local Government Code, or any other similar general Texas law in effect from time to time, or the City's Home Rule Charter, whichever is most restrictive.

Q. The Board shall prepare an annual budget to serve as a tool in controlling and administering the management and operation of the System. The annual budget shall reflect an estimate of Gross Revenues and an estimate of the disposition of these revenues in accordance with the flow of funds requirements of this Ordinance. The annual budget shall be presented and approved by the Board at least sixty (60) days prior to the beginning of the Board's Fiscal Year. Immediately following approval of the annual budget by the Board, it shall be submitted to the City Council for review and consultation. The Board may subsequently modify its approved budget by giving notice thereof to the City.

R. The Board shall prepare and administer, and may amend from time to time, a master plan for the System (the *Master Plan*), addressing the water resource and capital improvement projects required to accommodate the projected growth and development of the service area of the System. The Master Plan (and any amendment thereof) shall be approved by the Board and submitted for consideration and approval by the City Council in accordance with applicable provisions of the City's Home Rule Charter then in effect.

S. The Board shall provide the City Council with a complete briefing on any matter of litigation which is being contemplated involving the Board as a plaintiff against the City or any of its agencies, and City Council approval shall be obtained by the Board prior to the formal initiation of any such matter of litigation. Unless the City Attorney recommends City Council approval with respect to a particular matter of litigation proposed to be initiated by the Board, all other matters of litigation initiated by the Board may be approved by the Board without approval of the City Council.

T. The Board shall establish an appeals process for disciplinary actions involving its employees. An appeals committee, composed of at least three (3) persons who are neither employees nor Members of the Board, shall be appointed by the Board, and such committee shall operate under rules established by the Board from time to time. Such committee shall make recommendations to the Chief Executive Officer of the System, with the final determination concerning disposition of a disciplinary action being made by the Chief Executive Officer of the System. The Board shall further establish Equal Employment Opportunity and Affirmative Action programs in compliance with applicable federal and State of Texas guidelines. All personnel policies established by the Board shall parallel those of the City in effect from time to time insofar as practicable.

U. During each Fiscal Year, the Board shall prepare and formally present to the City Council a minimum of two (2) reports regarding the status of water resource planning and development, other water related issues being undertaken or contemplated by the Board, and other matters previously requested by the City Council.

V. The City Council reserves the right, by ordinance, to abolish the Board and thereafter transfer control, maintenance, and operation of the System to a department of the City in accordance with the provisions of the laws of the State of Texas and the City's Home Rule Charter. The City Council may so abolish the Board at any regular or special meeting of the City Council upon the affirmative vote of 3/4 of the members of the City Council then holding office. Such vote must be preceded by at least two (2) public hearings conducted by the City Council at least 30 days apart. Notice of such public hearings and the subject matter to be discussed shall be published at least one (1) time prior to each such hearing in a newspaper of general circulation within the City at least 15 days prior to the hearing. Such hearings may be conducted at a regular or special meeting of the City Council at its regular meeting place or in some other location designated by the City Council, and the calling of such hearings and the authorization of the publication of such notices may be by majority vote of all members of the City Council then holding office at any regular or special meeting of the City Council. The ordinance abolishing the Board shall name the effective date of the abolition of the Board and the transfer of maintenance, control, and operation of the System to the City. By the same procedure, the City Council may subsequently reconstitute the Board and thereafter transfer control, maintenance, and operation of the System to such Board as otherwise set forth in this Ordinance.

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APPENDIX E

FORM OF CO-BOND COUNSEL'S OPINION

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Norton Rose Fulbright US LLP
111 W. Houston Street, Suite 1800
San Antonio, Texas 78205

Escamilla & Poneck, LLP
700 North St. Mary's Street, Suite 850
San Antonio, Texas 78205

IN REGARD to the authorization and issuance of the "City of San Antonio, Texas Water System Junior Lien Revenue Bonds, Series 2020C (No Reserve Fund)" (the *Bonds*), dated July 1, 2020 in the aggregate principal amount of $153,390,000, we have reviewed the legality and validity of the issuance thereof by the City Council of the City of San Antonio, Texas (the *City*). The Bonds are issuable in fully registered form only, in denominations of $5,000 or any integral multiple thereof, and have Stated Maturities of May 15 in each of the years 2026 through 2033, and of May 15 in each of the years 2035 through 2042, May 15, 2046 (4.00% coupon), May 15, 2046 (5.00% coupon), and May 15, 2050, unless optionally or mandatorily redeemed prior to Stated Maturity in accordance with the terms stated on the face of the Bonds. Interest on the Bonds accrues from the dates, at the rates, in the manner, and is payable on the dates, all as provided in the ordinance (the *Ordinance*) authorizing the issuance of the Bonds. Capitalized terms used herein without definition shall have the meanings ascribed thereto in the Ordinance.

WE HAVE SERVED AS CO-BOND COUNSEL for the City solely to pass upon the legality and validity of the issuance of the Bonds under the laws of the State of Texas, and with respect to the exclusion of the interest on the Bonds from the gross income of the owners thereof for federal income tax purposes and for no other purpose. We have not been requested to investigate or verify, and have not independently investigated or verified, any records, data, or other material relating to the financial condition or capabilities of the City or the City's utility system and have not assumed any responsibility with respect to the financial condition or capabilities of the City or the disclosure thereof in connection with the sale of the Bonds. We express no opinion and make no comment with respect to the sufficiency of the security for or the marketability of the Bonds. Our role in connection with the City's Official Statement prepared for use in connection with the sale of the Bonds has been limited as described therein.

WE HAVE EXAMINED the applicable and pertinent laws of the State of Texas and the United States of America. In rendering the opinions herein we rely upon (1) original or certified copies of the proceedings of the City Council of the City in connection with the issuance of the Bonds, including the Ordinance, the Paying Agent/Registrar Agreement between the City and UMB Bank, N.A., Dallas, Texas, and a resolution adopted by the Board of Trustees (the *Board*) of the San Antonio Water System (*SAWS*); (2) customary certifications and opinions of officials of the City and SAWS; (3) certificates executed by officers of the City and SAWS relating to the expected use and investment of proceeds of the Bonds and certain other funds of the City and SAWS, and to certain other facts within the knowledge and control of the City and SAWS; and (4) such other documentation, including an examination of the Bond executed and delivered initially by the City, and such matters of law as we deem relevant to the matters discussed below. In such examination, we have assumed the authenticity of all documents submitted to us as originals, the conformity to original copies of all documents submitted to us as certified copies, and the accuracy of the statements and information contained in such certificates. We express no opinion concerning any effect on the following opinions which may result from changes in law effected after the date hereof.

BASED ON OUR EXAMINATION, IT IS FURTHER OUR OPINION that the Bonds have been duly authorized and issued in conformity with the laws of the State of Texas now in force and that the Bonds are valid and legally binding special obligations of the City enforceable in accordance with the terms and conditions described therein, except to the extent that the enforceability thereof may be affected by bankruptcy, insolvency, reorganization, moratorium, or other similar laws affecting creditors' rights or the exercise of judicial discretion in accordance with general principles of equity. The Bonds are payable from and equally and ratably secured, together with the currently outstanding Junior Lien Obligations, solely by a lien on and pledge of the Net Revenues, derived from the operation of the System that is junior and inferior to the lien thereon and pledge thereof securing the payment of the currently outstanding Senior Lien Obligations and any Additional Senior Lien Obligations hereafter issued by the City, but prior and superior to the lien thereon and pledge thereof securing the payment of the currently outstanding Subordinate Lien Obligations and any Additional Subordinate Lien Obligations or Inferior Lien Obligations hereafter issued by the City. The Bonds are issued as Junior Lien Obligations–No Reserve Fund and, as such, are not additionally secured by a lien on and pledge of the Reserve Fund. In the Ordinance, the City retains the right to issue Additional Senior Lien Obligations, Additional Junior Lien Obligations, Additional Subordinate Lien Obligations, and Inferior Lien Obligations, without limitation as to principal amount but subject to any terms, conditions, or restrictions as may be applicable thereto under law or otherwise. The Bonds do not constitute a legal or equitable pledge, charge, lien, or encumbrance upon any property of the City or SAWS, except with respect to the Net Revenues. The holders of the Bonds shall never have the right to demand payment of the Bonds out of any funds raised or to be raised by taxation.

IT IS FURTHER OUR OPINION THAT, assuming continuing compliance after the date hereof by the City and the Board with the provisions of the Ordinance upon the representations and certifications of the City and SAWS made in a certificate of even date herewith pertaining to the use, expenditure, and investment of the proceeds of the Bonds, under existing statutes, regulations, published rulings, and court decisions (1) interest on the Bonds will be excludable from the gross income, as defined in section 61 of the Internal Revenue Code of 1986, as amended to the date hereof (the *Code*), of the owners thereof for federal income tax purposes, pursuant to section 103 of the Code and (2) interest on the Bonds will not be included in computing the alternative minimum taxable income of the owners thereof.

WE EXPRESS NO OTHER OPINION with respect to any other federal, state, or local tax consequences under present law or any proposed legislation resulting from the receipt or accrual of interest on, or the acquisition or disposition of, the Bonds. Ownership of tax exempt obligations such as the Bonds may result in collateral federal tax consequences to, among others, financial institutions, life insurance companies, property and casualty insurance companies, certain foreign corporations doing business in the United States, S corporations with subchapter C earnings and profits, owners of an interest in a financial asset securitization investment trust, individual recipients of Social Security or Railroad Retirement Benefits, individuals otherwise qualifying for the earned income credit, and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry, or who have paid or incurred certain expenses allocable to, tax–exempt obligations.

OUR OPINIONS ARE BASED on existing law, which is subject to change. Such opinions are further based on our knowledge of facts as of the date hereof. We assume no duty to update or supplement our opinions to reflect any facts or circumstances that may thereafter

Legal Opinion of Norton Rose Fulbright US LLP and Escamilla & Poneck, LLP in connection with the authorization and issuance of "CITY OF SAN ANTONIO, TEXAS WATER SYSTEM JUNIOR LIEN REVENUE BONDS, SERIES 2020C (NO RESERVE FUND)"

come to our attention or to reflect any changes in any law that may thereafter occur or become effective. Moreover, our opinions are not a guarantee of result and are not binding on the Internal Revenue Service; rather, such opinions represent our legal judgment based upon our review of existing law that we deem relevant to such opinions and in reliance upon the representations and covenants referenced above.

Norton Rose Fulbright US LLP

Escamilla & Poneck, LLP

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CITY OF SAN ANTONIO, TEXAS • WATER SYSTEM JUNIOR LIEN REVENUE BONDS, SERIES 2020C (NO RESERVE FUND)

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