

## CAFR <br> Comprehensive Annual Financial Report

For the Years Ended December 31, 2017 and 2016

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# COMPREHENSIVE ANNUAL FINANCIAL REPORT OF THE <br> SAN ANTONIO WATER SYSTEM A COMPONENT UNIT OF THE CITY OF SAN ANTONIO, TEXAS 

For the Years Ended December 31, 2017 and 2016

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INTRODUCTION

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Mr. Berto Guerra, Jr., Chairman<br>Ms. Pat Jasso, Vice-Chairman<br>Ms. Amy Hardberger, Trustee<br>Ms. Pat Merritt, Trustee<br>Mr. David McGee, Trustee<br>Mr. Eduardo Parra, Trustee<br>Hon. Ron Nirenberg, Mayor

Trustees:
In accordance with the requirements of City Ordinance No. 75686, we are pleased to submit herewith the Comprehensive Annual Financial Report (CAFR) of the San Antonio Water System (SAWS) for the year ended December 31, 2017. We believe that the financial and statistical information presented in the report is accurate in all material respects and that all disclosures necessary to enable the reader to gain an understanding of SAWS' financial status have been included.

The information contained in this report is the responsibility of management. Management assumes this responsibility based upon a comprehensive framework of internal control that it has established for this purpose. This internal control structure has been designed to ensure that the assets of SAWS are protected from loss, theft, or misuse and to ensure that adequate accounting data is compiled to allow for the preparation of financial statements in conformity with accounting principles generally accepted in the United States of America. The internal control structure is designed to provide reasonable, but not absolute, assurance that the objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived and (2) the valuation of costs and benefits requires estimates and judgments by management.

City Ordinance No. 75686 also requires that the annual financial report be submitted for audit by an independent accountant. The report of our independent auditors, Baker Tilly Virchow Krause, LLP is included in the financial section of the 2017 CAFR. Their report expresses an unmodified or "clean" opinion as to the fairness of the presentation of our financial statements. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluating the overall financial statement presentation. The results of the audit of SAWS for the year ended December 31, 2017 provided no instances of material weaknesses in the internal control structure.

The Management's Discussion and Analysis (MD\&A) beginning on page 3 provides a narrative introduction, overview, and analysis of the basic financial statements. This transmittal letter complements the MD\&A and should be read in conjunction with it.

## PROFILE OF SAN ANTONIO WATER SYSTEM

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

Final City Council approval for such consolidation was given on April 30, 1992 with the approval of Ordinance No. 75686 which provided for the consolidation of all city owned utilities related to water, including the water, wastewater, and water reuse systems, into the San Antonio Water System.

The City, which is the county seat of Bexar County, is located in south central Texas, approximately 80 miles south of the state capital of Austin, 200 miles west of Houston and 150 miles northeast of Laredo on the Mexican border. The most recent population estimate from the U. S. Census Bureau is $1,517,866$ for San Antonio and 1,928,680 for Bexar County. The U.S. Census Bureau currently ranks San Antonio as the second largest city in Texas and the seventh largest city in the United States. The climate in San Antonio is characterized by warm summers with mild winters. Based on data observed over a thirty year period, the average high temperature in August is 96 degrees Fahrenheit, with the average low temperature in January of 41 degrees. Precipitation for the City averages approximately 32 inches annually.

SAWS 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; collection and treatment of wastewater; and distribution of recycled water. Additionally, SAWS owns and operates five thermal energy facilities providing chilled water services to governmental and private entities. In 2017, SAWS provided potable water service to over 493,000 customer connections which represents nearly all of the water utility customers in Bexar County, while providing wastewater services to more than 442,000 customer connections representing approximately $93 \%$ of the wastewater customers in Bexar County not utilizing septic systems. As of December 31, 2017, SAWS had 1,723 employees and provided maintenance for more than 12,500 miles of water and sewer mains.

The complete management and control of SAWS has been vested in the San Antonio Water System Board of Trustees ("the Board"). The Board consists of the Mayor and six Trustees who are residents of the City of San Antonio or reside within the area serviced by SAWS. With the exception of the Mayor, all other trustees are appointed by the City Council for four year staggered terms and are eligible for reappointment for one additional four-year term. Four trustees must be appointed from four different quadrants in the City and two trustees are appointed from the north and south sides of the City. In addition to appointing the SAWS trustees, City Council must approve all changes in SAWS rates and any debt issued by SAWS. The general operations of SAWS are under the supervision of the President/Chief Executive Officer who is employed by the Board. The financial statements of SAWS are presented in the CAFR of the City of San Antonio as a major discretely presented component unit.

On January 28, 2012, SAWS assumed the operational control and management of the Bexar Metropolitan Water District (BexarMet). SAWS operated the former BexarMet as a separate entity known as SAWS District Special Project (SAWS DSP) from January 2012 until January 2016. In February 2016, all the outstanding debt of SAWS DSP was refunded with SAWS issued debt and the assets and liabilities of SAWS DSP were transferred to SAWWS. On January 1,2017 , SAWS completed all legally required steps to fully integrate the operations and customers of the former BexarMet with SAWS. This final step of full integration included the application of consistent rates for both existing SAWS and former BexarMet customers.

The mission, vision and values of the San Antonio Water System are as follows:

Mission<br>Sustainable, Affordable, Water Services<br>Vision<br>To be leaders in delivering responsible water services for life<br>Values<br>Excellence, Integrity and Respect

## ECONOMIC CONDITIONS AND OUTLOOK

## LOCAL ECONOMY

The San Antonio economy has experienced robust, sustained growth since the mid-1990's. This economic growth coupled with the net in-migration trends experienced in many areas of Texas has resulted in population growth that has exceeded national averages. While job growth slowed significantly during the national downturn experienced from 2008-2012 with average annual growth of $1.1 \%$, it has steadily increased since 2012 through 2017 at an average annual rate of $3.2 \%$. The diversity of the San Antonio economy has provided a measure of stability through up and down economic cycles. Specifically, San Antonio's strategic positions in key employment sectors including government and military, biomedical sciences, medical services, tourism, and hospitality contribute to this stability. San Antonio's favorable economic position relative to the nation is reflected in the fact that the San Antonio-New Braunfels MSA unemployment rate was $3.0 \%$, while the nation's was $4.1 \%$ at December 31, 2017.

A summary of San Antonio's nonagricultural employment by industry since 2008 is as follows:

| San Antonio MSA Non-Farm Employment by Industry (2008-2017) as of December of earh year 2008-2017 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| Natural Resources, Mining and Construction | 63,100 | 57,400 | 58,700 | 57,900 | 51,100 | +7,000 | H,000 | 45,200 | 48,600 | ,500 |
| Manufacturing | +8,300 | 48,100 | 47,400 | 47,000 | +6,300 | +6,900 | 46,400 | 45,300 | +3,500 | +5,600 |
| Trade, Transportation and Utilties | 187,100 | 186,500 | 181,300 | 175,000 | 166,700 | 159,000 | 153,700 | 149,400 | 1+8,500 | 154,600 |
| Information | 20,500 | 21,100 | 21,500 | 21,800 | 21,500 | 20,500 | 19,700 | 18,400 | 18,600 | 21,000 |
| Financial Activitics | 90,100 | 89,000 | 86,200 | 82,400 | 78,600 | 76,300 | 71,900 | 69,800 | 67,100 | 67,400 |
| Professiomal and Business Services | 138,000 | 133,500 | 126,900 | 122,800 | 117,300 | 114,100 | 108,200 | 104,300 | 105,800 | 107,800 |
| Educational and Health Services | 163,100 | 161,300 | 153,900 | 147,400 | 1+2,200 | 138,700 | 137,100 | 131,200 | 127,100 | 122,900 |
| Letsure and Hospitality | 13-,000 | 127,800 | 123,000 | 117,700 | 114,200 | 110,800 | 105,600 | 101,200 | 97,500 | 99,300 |
| Other Services | 38,000 | 37,300 | 36,100 | 35,000 | 35,300 | 34,500 | 32,800 | 33,000 | 32,000 | 31,800 |
| Government | 174,100 | 172,300 | 171,300 | 168,200 | 165,700 | 16+,300 | 163,700 | 166,200 | 163,900 | 100,100 |
| Total Non-Farm Employment | 1,056,300 | 1,03-4,100 | 1,005,100 | 976,100 | 938,900 | 912,100 | 883,100 | B64, 700 | 852,600 | 866,000 |
| Source: U.S. Bureau of Labor Statisties |  |  |  |  |  |  |  |  |  |  |

Additional information regarding demographic and economic conditions for San Antonio can be found in the Statistical Section of this report on pages 111 and 112.

## LONG-RANGE FINANCIAL PLANNING

Long-range financial planning is critical for SAWS to accomplish its mission. The overriding goal of financial planning, analysis, and strategy development is to improve the SAWS financial position in order to meet the short-term and long-term operational and strategic objectives of SAWS. In developing the SAWS financial plan, concerns of all stakeholders are considered with various scenarios and potential risks evaluated by
executive management in reaching the optimum balance of limited resources with organizational needs and stakeholder concerns.

The short-term planning horizon of five years is the basis for implementing, through the formalized budget, short-term goals and objectives in support of the strategic plan. The long-term planning process covers twenty years in length and sets the course of the overall direction of financial, operational, and capital resource allocation priorities of the system.

Major strategic policy guidelines emphasized are long-term water supply needs and infrastructure replacement goals. Strategic priorities include, but are not limited to, water supply, system expansion, environmental sustainability, system reliability and service consistency, innovation and technology, financial strength, and human resource development. All priorities are planned through operational, capital, and financial resource assessment and allocation.

All potential rate adjustments are evaluated in the context of customer affordability measures and key financial statistics. The affordability of the customer bills are evaluated relative to the income of the system's customers and price competitiveness with other utilities. Key financial statistics include: debt coverage ratios for total debt; percentage of capital financed with cash; and overall level of cash balances.

## Capital Improvement Program

The five year Capital Improvement Program (CIP) is a critical component of SAWS' short-term financial plan. Capital expenditures for the next five years are projected to total in excess of $\$ 2$ billion.


Beginning with the development of the Water Supply Fee in 2001, SAWS capital program was strongly focused on developing new water supplies. As a result of SAWS' settlement with the U.S. Environmental Protection Agency (EPA) in 2013, wastewater infrastructure replacements have played a larger role in SAWS capital program. In order to meet the commitments under the EPA Consent Decree, wastewater projects are expected to make up a little more than half of the expected capital needs over the next five years. At the same time, SAWS is making a concerted effort to ensure that water delivery infrastructure is adequately addressed. Approximately $\$ 720$ million will be invested to upgrade and replace water lines, storage tanks, wells and pumps
in order to ensure the reliable delivery of water throughout SAWS service area. Investments in Water Supply projects are expected to wind down fairly significantly over the five year horizon since water coming from the Vista Ridge project will support SAWS growing water needs for several decades. Water Supply investments during the next five years primarily relate to the completion of the integration pipeline that will bring water from the $\mathrm{H}_{2}$ Oaks facility in southeast Bexar County to the far west side of San Antonio.

## 2018 and 2019 Rate Adjustments

To support the requirements of the 2018 budget, a $5.8 \%$ rate adjustment is required for the average residential customer (assuming 7,092 gals water and 5,668 gallons sewer usage per month).

The SAWS Board and the City Council also approved rate adjustments for 2019 at the same time the 2018 rate adjustments were approved. The two years of rate adjustments reflects the commitment of the SAWS Board and the City Council to continued improvement and maintenance of water and sewer infrastructure in San Antonio. Additionally rate adjustments for recycled water service were approved which mirror the average impact of Water Delivery and Water Supply rate adjustments on the average residential customer for potable water service.

| Rate Category | 2018 <br> Adjustments | 2019 <br> Adjustments |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Wastewater | $3.60 \%$ | $8.00 \%$ |  |  |  |
| Water Delivery | $9.70 \%$ | $0.40 \%$ |  |  |  |
| Water Supply | $4.50 \%$ | $4.30 \%$ |  |  |  |
| Combined Impact for <br> average residential customer | $5.80 \%$ | $4.70 \%$ |  |  |  |
| Recycled Water |  |  |  | $7.60 \%$ | $1.80 \%$ |

*Average based on 7,092 gallons water and 5,668 gallons of sewer usage per month, excluding EAA and TCEQ passthrough fees and City of San Antonio stornwater fees.

## FINANCIAL POLICIES

## Rates and Charges

During the development of the Annual Budget, SAWS develops revenue budgets and related rates and charges sufficient to:
a. Pay operating and maintenance expenses;
b. Produce pledged revenues sufficient to pay:
i. 1.25 times the annual debt service requirements and
ii. The amounts required to be deposited in any reserve fund created for the payment and security of senior lien obligations;
c. pay outstanding debt service obligations;
d. fund transfers to the City of San Antonio; and
e. pay any other debt payable from the net revenues.

SAWS' revenue budgets are based on projected customer growth and estimated water and wastewater usage per customer. Periods with above normal rainfall can have a significant impact on water usage and associated revenue. As a result, usage forecasts which take into account recent trends and weather patterns are more heavily weighted to assume wetter than normal weather. During years where rainfall is lower than forecasted,
water usage increases and SAWS' operating revenues generally exceed forecasted amounts. SAWS uses these excess revenues to minimize future debt financing of its capital projects and to buffer the impact of extremely wet weather on revenues. Rainfall for 2017 was approximately 27 inches, below the norm of 32 inches for the San Antonio region. While the 2017 budget assumed a slight downward trend in average water usage per customer from the previous year, below normal rainfall for the year contributed to a $2.7 \%$ increase in total water usage from the prior year and a $1.3 \%$ favorable variance to the budgeted water usage. Increased average usage along with stronger than expected customer growth contributed to the $\$ 15$ million favorable variance in operating revenue for 2017. This favorable variance combined with favorable variances in non-operating revenues and expenses resulted in $\$ 43.9$ million in additional funds added to the Renewal and Replacement fund above the 2017 budgeted amount.

## Capital Funding

The funding of SAWS' capital program consists of cash and proceeds from the issuance of debt. Cash funding is defined as all sources of funding other than debt proceeds and includes unrestricted fund balances, developer contributions, and investment earnings. Debt proceeds are provided through the issuance of commercial paper and revenue bonds. In general, SAWS uses commercial paper as just-in-time debt financing which helps to reduce interest costs during the construction phase of capital projects. Eventually, revenue bonds are issued to term out the commercial paper borrowings.

Historically, SAWS' goal had been to fund approximately one-third of annual capital expenditures with cash sources. This level varies based on the availability of funds. During 2017, SAWS' capital expenditures totaled $\$ 259$ million with $35.5 \%$ or $\$ 92$ million of those expenditures having been funded with cash sources. SAWS is working toward increasing cash funding to approximately $50 \%$ of capital expenditures by 2020 .

## MAJOR INITIATIVES

## 2017 Water Management Plan

SAWS' first Water Management Plan was developed in 1998, introducing projected water demands and identifying the framework of future water sources to meet these demands. Since that first plan, SAWS has continuously produced updates incorporating changes in population, water demand patterns, regulations, and water supply options providing a clear direction for implementation.

Significant changes required updates to the Water Management Plan in 2005, 2009, and 2012. The most extensive revision occurred in 2012, with the assumption of the former Bexar Metropolitan Water District and the incorporation of the Edwards Aquifer Habitat Conservation Plan. Since the adoption of the 2012 Water Management Plan, SAWS has completed the Regional Carrizo and Brackish Groundwater Desalination projects, participated in successful implementation of the Edwards Aquifer Habitat Conservation Plan and navigated through the worst drought since the 1950's drought of record.

The 2017 Water Management Plan further refines and improves on the 2012 Water Management Plan utilizing better modeling tools, greater operational knowledge of diversified supplies through drought, disaggregated customer demands, risk management and an improved understanding of climatic conditions. The 2017 Water Management Plan continues SAWS' long-standing tradition of planning for and implementing a balanced mix of water supply projects and progressive water conservation programs.

SAWS has one of the most diversified and innovative water supply portfolios in the country. Over the last 20 years, SAWS has been a national leader in developing water supply for the purposes of reducing its reliance on the Edwards Aquifer and diversifying its portfolio, planning for one of the highest population growth corridors in the nation, and preparing for drought.

In planning for future water supplies, SAWS applies Drought of Record (DOR) conditions to all water supplies in its current inventory to calculate firm yield. The drought of the 1950s in Texas is widely recognized as the DOR for water resource planning purposes. Firm yield is defined by SAWS as the volume of water which can be produced from a specific source during a repeat of the DOR under existing regulatory, legal, contractual, hydrological or infrastructure constraints. An innovative feature of the 2017 Water Management Plan is that the hydrological and regulatory constraints experienced in the 2011-2014 drought and the 1950-1958 drought were merged, to create a more severe, hybrid DOR which adds a level of conservatism to water supply planning.

San Antonio's long-standing commitment and investment in water conservation has significantly impacted water consumption over the years. Through successfully cultivating an ethic of conservation SAWV', total per capita water consumption has decreased significantly from 225 gallons per capita per day (GPCD) in 1982 to 117 GPCD in 2017.

Continued conservation efforts coupled with the timely development of diversified water supply projects will provide water security for SAWS ratepayers through 2050 with current supplies and water supply projects currently under construction. Meeting demands beyond 2050 requires continued implementation of key elements in 2017 Water Management Plan to include: progressive GPCD goals, further diversification of supply, and targeted investment in infrastructure to reduce nonrevenue water loss. Implementing the 2017 Water Management Plan ensures water security for San Antonio through 2070.

Near-Term Projects (2017-2025)
During the near-term, SAWS will take a significant step in supply diversification with the purchase of water from the Vista Ridge project. Water conservation efforts will focus on reducing total water usage to 112 GPCD by 2025 .

SAWS has entered into a contract with Vista Ridge LLC to purchase up to 50,000 acrefeet per year of Carrizo/Simsboro Aquifer groundwater. Vista Ridge LLC will build and operate wells and a pipeline system to pump the groundwater in Burleson County and deliver it to San Antonio for 30 years. Project construction began during spring 2017.

SAWS will pay a fixed unit price for water delivered, plus all operating and maintenance and utility costs. Ownership of the wells and pipeline system will transfer to SAWS at the end of the term, after which a separate agreement with the owner of the groundwater leases, Blue Water Vista Ridge, will give SAWS the ability to continue
 production for an additional 30 year term and deliver the water at a much lower price. Combined, the two agreements provide for a 60 -year contracted supply of water. The project is expected to be completed by early 2020, adding to SAWS' diversified water supply portfolio.

SAWS' arrangement with Vista Ridge LLC is a first-of-its-kind water supply public-private partnership (P3) in Texas, which merges the strengths of a public utility and private industry. The agreement transfers risk of
project development, financing, and water source availability to Vista Ridge LLC. The project represents a major step forward in water diversification and will meet San Antonio's water needs for decades.

Mid-Term Projects (2016-2040)
As a result of the expansion of SAWS water supply portfolio from the Vista Ridge project, SAWS does not anticipate a new water supply project in the mid-term. During the latter portion of the mid-term planning horizon, SAWS anticipates relying more heavily on the ability to recover water stored in the Aquifer Storage and Recovery facility in order to delay the construction of costly water supply projects.

During this period, SAWS will strive to continue leading the nation in water conservation, aiming to reduce its total planned per capita consumption from 112 GPCD in 2025 to 96 GPCD in 2040. These per capita reductions will help to largely offset increases in demand stemming from population growth with its total annual demand during that time frame increasing by only 20,000 acre-feet.

## Long-Term Projects (2041-2070)

During the end of its planning horizon, water conservation goals are expected to reduce total usage to 88 GPCD by 2070 . Total demand during this period is only expected to increase by approximately 40,000 acre-feet. SAWS intends to bring online additional phases of the existing brackish desalination and Carrizo Aquifer water supply projects to meet these additional water demands.

The implementation of future phases of the brackish groundwater desalination and the Expanded Carrizo projects are highly flexible due to SAWS ownership and control. If any unforeseen circumstances arise during the near or mid-term in regards to SAWS water supply projects or to demand, SAWS has the ability to adjust the timing of these projects to fill those voids quickly.

More information about the 2017 Water Management Plan can be found at:
http://www.saws.org/Your Water/WaterResources/2017 WMP/

## Brackish Groundwater Desalination



In January 2017, Phase 1 of SAWS Brackish Groundwater Desalination plant came on line. The plant produces brackish water from the Wilcox Aquifer in southern Bexar County and treats it to drinking water quality standards. Phase I of the plant has the capacity to provide 13,440 acre-feet per year of drought-proof desalinated groundwater to San Antonio. Future phases will eventually bring the total supply from this program to 33,600 acre-feet per year. The desalination plant is located at the newly named H2Oaks Center in south Bexar County, where three sources of water are managed: Brackish groundwater, Aquifer Storage and Recovery and Local Carrizo. The Center provides research facilities for college/university students to help improve water technology and processes and offers educational tours to the public.

## Sanitary Sewer Collection System

In June 2013, SAWS approved a settlement with the U.S. Environmental Protection Agency (EPA) that will require additional work over 10 to 12 years to reduce sanitary sewer overflows (SOs). The work required to comply with the consent decree includes system-wide inspection, cleaning and evaluation of sanitary sewer pipelines. Additionally, increased investment in the replacement and rehabilitation of aging sewer infrastructure is necessary. The targeted replacement and rehabilitation program will be specifically tailored based on extensive condition assessments currently being performed. SAWS has significantly reduced the number of SOs as result of efforts made since 2012 to clean and replace sewer pipelines. The following chart shows the number of SSOs and annual rainfall since 2010.


## AWARDS AND ACKNOWLEDGEMENTS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to SAWS for its Comprehensive Annual Financial Report for the year ended December 31, 2016. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized Comprehensive Annual Financial Report whose contents conform to program standards. Such reports must satisfy both generally accepted accounting principles and applicable legal requirements. SAWS has received this recognition for its comprehensive annual financial report for twenty-four consecutive years. We believe our current report continues to conform to the Certificate of Achievement Program requirements and we are submitting it to GFOA.

SAWS also received the GFOA's Distinguished Budget Presentation Award for its annual budget document for the fiscal year beginning January 1, 2017. This is the twelfth consecutive year that SAWS has received this award. In order to receive this award, SAWS must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan and as a communications device.

The timely preparation of the CAFR for the year ended December 31, 2017 could not have been accomplished without the cooperation and dedicated services of the Accounting Department. We also wish to express sincere appreciation to each member of the Board for the interest and support provided in conducting the financial affairs of SAWS in a sound and progressive manner.


Robert R. Puente
President/
Chief Executive Officer

Sr. Vice President/
Chief Financial Officer

Vice President -
Accounting \& Business Planning

# San Antonio Water System 

Board of Trustees


Berto Guerra, Jr. Chairman

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Amy Hardberger


Pat Merritt
Eduardo Parra


Ron Nirenberg, ex Officio

San Antonio Water System
Organization Chart


Executive Management


Government Finance Officers Association

# Certificate of Achievement for Excellence in Financial Reporting 

# Presented to <br> San Antonio Water System <br> Texas 

For its Comprehensive Annual<br>Financial Report<br>for the Fiscal Year Ended

December 31, 2016
Chistophe P. Mowill
Executive Director/CEO

## FINANCIAL SECTION

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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 year ended December 31, 2017, 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 audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free 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, 2017, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

## Prior Period Financial Statements

The financial statements of SAWS as of December 31, 2016, were audited by other auditors whose report dated May 31, 2017, expressed an unmodified opinion on those statements.

## Emphasis of Matter

As discussed in Note A, SAWS Other Postemployment Benefit Plan adopted the provisions of GASB Statement No. 74, Financial Reporting for Other Postemployment Benefits Plans Other Than Pension in fiscal year 2017. Our opinion is not modified with respect to this matter.

## Other Matters

## Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information as listed in the table of contents be presented to supplement the 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 audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The supplemental information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the 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 2017 information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental information as of and for the year ended December 31, 2017, is fairly stated in all material respects in relation to the financial statements as a whole. The 2016 information was subjected to the auditing procedures applied in the audit of those basic financial statements by other auditors, whose report on such information stated that it was fairly stated in all material respects in relation to the 2016 basic financial statements as a whole.

## Other Information

Our audit was conducted for the purpose of forming an opinion 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 audit 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 March 30, 2018, 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 Filly Vichawfrause, LLP

Austin, Texas
March 30, 2018

## 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 the fiscal year ending December 31, 2017. Please read it in conjunction with SAWS' financial statements including the notes to the financial statements, which follow this section.

## FINANCIAL HIGHLIGHTS

- SAWS' net position increased by $\$ 240.9$ million during 2017, including an increase in unrestricted net position of $\$ 91.0$ million.
- Total assets and deferred outflows of resources increased $\$ 166.5$ million from 2016 to 2017, including net capital asset growth of $\$ 165.7$ million and an increase in unrestricted cash and investments of $\$ 74.8$ million.
- SAWS refunded $\$ 200.5$ million in long-term debt, reducing future debt service payments by nearly $\$ 10$ million and resulting in an economic gain of $\$ 7.5$ million.
- Operating revenues increased $\$ 44.3$ million or $7 \%$ from 2016 to 2017 primarily due to rate adjustments implemented during the year.
- Current year total debt coverage ratio was 1.89x for 2017 compared to 1.74 x for 2016.


## 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 Cbanges 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 Antomio 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 pension plans including changes in the net pension liabilities, annual contributions made to pension plans, annual investment returns, and SAWS' progress in funding its obligations to provide pension and other postemployment benefits to its employees.

Other supplemental information is presented for additional analysis and is 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.
- 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 |  |  |  | 2017-2016 |  |  | 2016-2015 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | As of December 31, |  |  |  | crease | \% | Increase |  |
| (amounts in thousands) | 2017 | 2016 | 2015 |  | ecrease) | Change | (Decrease) | Change |
| Current assets | \$ 643,337 | \$ 560,924 | \$ 488,023 |  | 82,413 | 15\% | \$ 72,901 | 15\% |
| Capital assets, net | 5,051,777 | 4,886,091 | 4,647,786 |  | 165,686 | 3\% | 238,305 | 5\% |
| Other non-current assets | 369,151 | 448,645 | 447,283 |  | $(79,494)$ | (18\%) | 1,362 | 0\% |
| Total Assets | 6,064,265 | 5,895,660 | 5,583,092 |  | 168,605 | 3\% | 312,568 | 6\% |
| Deferred outflows of resources | 93,340 | 95,397 | 62,580 |  | $(2,057)$ | (2\%) | 32,817 | 52\% |
| Total Assets and Deferred Outflows of Resources | 6,157,605 | 5,991,057 | 5,645,672 |  | 166,548 | 3\% | 345,385 | 6\% |
| Current liabilities | 215,280 | 222,787 | 218,178 |  | $(7,507)$ | (3\%) | 4,609 | $2 \%$ |
| Non-current liabilities | 3,085,719 | 3,152,128 | 3,020,807 |  | $(66,409)$ | (2\%) | 131,321 | 4\% |
| Total Liabilities | 3,300,999 | 3,374,915 | 3,238,985 |  | (73,916) | (2\%) | 135,930 | 4\% |
| Deferred inflows of resources | 2,328 | 2,793 | 6,783 |  | (465) | - | $(3,990)$ | - |
| Total Liabilities and Deferred Inflows of Resources | 3,303,327 | 3,377,708 | 3,245,768 |  | (74,381) | (2\%) | 131,940 | 4\% |
| Net Position: |  |  |  |  |  |  |  |  |
| Net irvestment in capital assets | 2,217,283 | 2,106,957 | 1,939,292 |  | 110,326 | 5\% | 167,665 | 9\% |
| Restricted | 358,453 | 318,889 | 334,260 |  | 39,564 | 12\% | $(15,371)$ | (5\%) |
| Unrestricted | 278,542 | 187,503 | 126,352 |  | 91,039 | 49\% | 61,151 | 48\% |
| Total Net Position | \$2,854,278 | \$2,613,349 | \$2,399,904 | \$ | 240,929 | 9\% | \$ 213,445 | 9\% |

Net Position: SAWS' net position increased $\$ 240.9$ million from 2016 to 2017 and increased $\$ 213.5$ million from 2015 to 2016. 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 nonfinancial, 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 $\$ 110.3$ million between 2016 and 2017 and $\$ 167.7$ million from 2015 to 2016.

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 increased $\$ 39.6$ million from 2016 to 2017 and decreased $\$ 15.4$ million from 2015 to 2016 primarily due to changes in amounts restricted for construction.

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 increased $\$ 91.0$ million from 2016 to 2017 and $\$ 61.2$ million from 2015 to 2016 as funds provided by operations exceeded transfers to the Debt Service Fund and capital expenditures paid with renewal and replacement funds.

## FINANCIAL ANALYSIS - REVENUES, EXPENSES AND CHANGES IN NET POSITION

During 2017, SAWS' net position increased by $\$ 240.9$ million which consisted of income before capital contributions of $\$ 99.5$ million and capital contributions of $\$ 141.4$ million. In 2016, SAWS' net position increased $\$ 213.4$ million which consisted of income before capital contributions of $\$ 67.7$ million and capital contributions of $\$ 145.7$ million.

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| CONDENSED REVENUES, EXPENSES AND CHANGES IN NET POSITION INFORMATION |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  |  |  |  | 2017-2016 |  |  | 2016-2015 |  |  |
| (amounts in thousands) |  | 2017 |  | $\begin{aligned} & \text { December } 3 \\ & 2016 \end{aligned}$ |  | 2015 | Increase <br> (Decrease) |  | \% <br> Change | Increase (Decrease) |  | \% <br> Change |
| Operating revenues |  |  |  |  |  |  |  |  |  |  |  |  |
| Water delivery system | \$ | 202,264 | \$ | 190,913 | \$ | 168,338 | \$ | 11,351 | 6\% | \$ | 22,575 | 13\% |
| Water supply system |  | 202,143 |  | 185,037 |  | 163,759 |  | 17,106 | 9\% |  | 21,278 | 13\% |
| Wastewater system |  | 250,977 |  | 234,966 |  | 213,833 |  | 16,011 | 7\% |  | 21,133 | 10\% |
| Chilled water |  | 11,368 |  | 11,541 |  | 11,102 |  | (173) | (1\%) |  | 439 | 4\% |
| Total operating revenues |  | 666,752 |  | 622,457 |  | 557,032 |  | 44,295 | 7\% |  | 65,425 | 12\% |
| Non-opertating revenues |  | 10,407 |  | 8,146 |  | 6,079 |  | 2,261 | 28\% |  | 2,067 | $34 \%$ |
| Total Revenues |  | 677,159 |  | 630,603 |  | 563,111 |  | 46,556 | 7\% |  | 67,492 | 12\% |
| Operating expenses |  |  |  |  |  |  |  |  |  |  |  |  |
| Salaries and fringe benefits |  | 148,058 |  | 142,315 |  | 133,681 |  | 5,743 | 4\% |  | 8,634 | 6\% |
| Contractual services |  | 168,350 |  | 170,845 |  | 163,768 |  | $(2,495)$ | (1\%) |  | 7,077 | 4\% |
| Materials and supplies |  | 23,159 |  | 21,959 |  | 23,490 |  | 1,200 | 5\% |  | $(1,531)$ | (7\%) |
| Other charges |  | 11,150 |  | 12,702 |  | 8,129 |  | $(1,552)$ | (12\%) |  | 4,573 | 56\% |
| Less costs capitalized to construction in progress |  | $(32,275)$ |  | $(32,426)$ |  | $(37,822)$ |  | 151 | 0\% |  | 5,396 | (14\%) |
| Depreciation expense |  | 152,072 |  | 142,856 |  | 141,259 |  | 9,216 | 6\% |  | 1,597 | 1\% |
| Total operating expenses |  | 470,514 |  | 458,251 |  | 432,505 |  | 12,263 | $3 \%$ |  | 25,746 | 6\% |
| Non-operating expenses |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest expense |  | 86,615 |  | 86,566 |  | 89,971 |  | 49 | 0\% |  | $(3,405)$ | (4\%) |
| Debtissue costs |  | 1,385 |  | 4,716 |  | 3,831 |  | $(3,331)$ | (71\%) |  | 885 | 23\% |
| Other finance charges |  | 2,697 |  | 2,121 |  | 2,041 |  | 576 | 27\% |  | 80 | 4\% |
| Gain on sale of capital assets |  | (951) |  | $(3,087)$ |  | $(4,674)$ |  | 2,136 | (69\%) |  | 1,587 | (34\%) |
| Payments to City of San Antorio |  | 17,276 |  | 14,228 |  | 12,683 |  | 3,048 | 21\% |  | 1,545 | 12\% |
| Payments to other entities |  | 108 |  | 109 |  | 106 |  | (1) | (1\%) |  | 3 | 3\% |
| Total non-operating expenses |  | 107,130 |  | 104,653 |  | 103,958 |  | 2,477 | 2\% |  | 695 | 1\% |
| Total Expenses |  | 577,644 |  | 562,904 |  | 536,463 |  | 14,740 | 3\% |  | 26,441 | 5\% |
| Increase in net position |  |  |  |  |  |  |  |  |  |  |  |  |
| before capital contributions |  | 99,515 |  | 67,699 |  | 26,648 |  | 31,816 | 47\% |  | 41,051 | 154\% |
| Capital Contributions |  | 141,414 |  | 145,746 |  | 136,023 |  | $(4,332)$ | (3\%) |  | 9,723 | 7\% |
| Change in Net Position |  | 240,929 |  | 213,445 |  | 162,671 |  | 27,484 | 13\% |  | 50,774 | 31\% |
| Net Position, beginning of year |  | 2,613,349 |  | 2,399,904 |  | 2,237,233 |  | 213,445 | 9\% |  | 162,671 | 7\% |
| Net Position, end of year | \$ | 2,854,278 | \$ | 2,613,349 | \$ | 2,399,904 | \$ | 240,929 | 9\% | \$ | 213,445 | 9\% |

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 $\$ 622.5$ million in 2016 to $\$ 666.8$ million in 2017. An average water rate increase of $6.8 \%$ and an increase in water usage of $2.7 \%$ contributed to the increase in revenue from 2016. Beginning in 2017, a class of SAWS customers located in the former District Special Project (DSP) service area moved to the rates paid by all other SAWS customers.

SAWS' operating revenues increased from $\$ 557$ million in 2015 to $\$ 622.5$ million in 2016. The biggest contributor to the increase in revenues was an average rate increase of $7.5 \%$ that went into effect in 2016 for most SAWS customers. Customer growth averaged $1.7 \%$ during 2016, contributing to the growth in operating revenues.

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 $\$ 11.4$ million or $6 \%$ to $\$ 202.3$ million for 2017. Beginning in 2017, a class of SAWS customers located in the former District Special Project (DSP) service area moved to the rates paid by all other SAWS customers. The impact of this change somewhat offset the impact from a water delivery rate increase of $8.6 \%$ and increased water usage. Water Delivery operating revenues increased $\$ 22.6$ million or $13 \%$ to $\$ 190.9$ million for 2016 , largely driven by rate increase of $9.9 \%$ and an increase in water usage of $1.65 \%$.


Total rainfall was 27.33 inches for 2017, approximately $15 \%$ below normal rainfall of 32.27 inches and nearly $40 \%$ less than 2016 rainfall of 43.92 inches. 2016 total rainfall was consistent with 2015.


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 fee 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 $\$ 17.1$ million or $9 \%$ from 2016 to $\$ 202.1$ million for 2017 as a result of a $6.9 \%$ water supply rate increase and increased usage. The transition of DSP customers to SAWS rates also served to increase Water Supply operating revenues in 2017. Water Supply operating revenues increased $\$ 21.3$ million or $13 \%$ from 2015 to $\$ 185$ million for 2016 as a result of a $9.3 \%$ rate increase and increased water usage.

The collection and treatment of wastewater is the primary function of the Wastewater core business. Approximately $60 \%$ 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 $15^{\text {th }}$ 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. Due to heavy rainfall in 2015, the AWC that went into effect in April 2015 fell to 5,186 gallons which is the lowest level in SAWS' history. More normal rainfall during the 2016 winter average measurement period resulted in a $7.3 \%$ increase in the AWC that went into effect in April 2016. Heavier rainfall during the beginning of the 2017 winter average measurement period resulted in a decrease in the AWC of $4.2 \%$.


Wastewater operating revenues increased $\$ 16$ million of $7 \%$ to $\$ 251$ million in 2017 primarily due to a rate increase of $5.6 \%$ and customer growth of $1.7 \%$. Wastewater operating revenues increased $\$ 21.1$ million or $10 \%$ to $\$ 235$ million in 2016 primarily due to a rate increase of $5.3 \%$, the increase in the residential AWC and customer growth of $1.8 \%$.

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 $\$ 11.4$ million for 2017 from $\$ 11.5$ million for 2016. Chilled Water operating revenues for 2016 were slightly more than the $\$ 11.1$ million for 2015.

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 $\$ 2.3$ million in 2017 from 2016 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. Non-operating investments increased $\$ 2.1$ million in 2016 from 2015 as the increase in the yield on investments more than offset a decrease in the average investment balance.

Operating Expenses: Total 2017 operating expenses of $\$ 470.5$ million increased $\$ 12.3$ million or $2.7 \%$ from 2016 levels as increases in salaries and benefits, and depreciation were partially offset by decreases in contractual services and other charges.


Salary and benefit related costs increased $\$ 5.7$ million or $4.0 \%$ from 2016 to 2017 largely as a result of merit adjustments given to employees and a $1.7 \%$ increase in filled positions. Contractual services decreased $\$ 2.5$ million or $1.5 \%$ in 2017 as a decrease in purchased water payments and contractual services related to sewer line condition assessment and cleaning more than offset the increase in electrical expenses associated with SAWS new groundwater desalination facility. Other charges decreased $\$ 1.5$ million or $12 \%$ in 2017 primarily due to a decrease in claims expenses, including workers compensation. Depreciation expense increased $\$ 9.2$ million or $6 \%$ as result of capital additions during the year, including the groundwater desalination plant that came online in early 2017.

Total 2016 operating expenses of $\$ 458.3$ million increased $\$ 25.7$ million or $6 \%$ from 2015 levels primarily due to increases in salaries and benefits, contractual services and other charges combined with a decrease in costs capitalized to construction in progress. The increase in salaries and benefits was primarily due to an increase in pension expense as a result of differences between actual and projected investments earnings during the measurement periods. The increase in contractual services was due to an increase in purchased water payments and outsourcing of a portion of the meter reading function. A write off of $\$ 2.1$ million in design and project costs that had previously been capitalized contributed to the increase in other charges from 2015.

Non-operating Expenses: Non-operating expenses increased $\$ 2.5$ million or $2 \%$ in 2017 as an increase in payments to the City of San Antonio and a reduction in the gain on sale of assets was partially offset by a decrease in debt issue costs. Interest expense for 2017 was comparable to 2016 as a $2 \%$ increase in the average debt outstanding was offset by a decrease in the average cost of debt from $3.18 \%$ in 2016 to $3.07 \%$ in 2017. In 2016 non-operating expenses increased $\$ 0.7$ million or $1 \%$ from 2105 as a decrease in interest expense resulting from bond refundings was more than offset by increases in debt issue costs and payments to the City of San Antonio as well as a decrease in gains on sales of capital assets. Average debt outstanding decreased $1 \%$ as debt repayments exceeded borrowings and the average cost of debt decreased from $3.24 \%$ in 2015 to $3.18 \%$ in 2016.

Capital Contributions: Capital contributions for 2017 totaled $\$ 141.4$ million which represents a decrease of $\$ 4.3$ million from 2016. While capital recovery fees increased 7\% from 2016, plant contributions from developers decreased $18 \%$. In 2016, capital contributions totaled $\$ 145.7$ million, an increase of $\$ 9.7$ million from 2015. Development activity was strong in 2016, resulting in a $3 \%$ increase in plant contributions and a $6 \%$ increase in capital recovery fees.

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| CAPITAL CONTRIBUTIONS2016-2015 |  |  |  |  |  |  |  |  |  |  |  |  |
| (\$ in thousands) | $\begin{gathered} \text { As of December 31, } \\ 2017 \quad 2016 \end{gathered}$ |  |  |  |  | 2015 | Increase (Decrease) |  | \% <br> Change | Increase (Decrease) |  | \% <br> Change |
| Plant Contributions | \$ | 60,643 | \$ | 73,889 | \$ | 71,967 | \$ | $(13,246)$ | (18\%) | \$ | 1,922 | 3\% |
| Capital Recovery Fees |  | 72,846 |  | 67,991 |  | 64,056 |  | 4,855 | 7\% |  | 3,935 | 6\% |
| Contributions in Aid of Construction |  | 7,925 |  | 3,866 |  | - |  | 4,059 | 105\% |  | 3,866 | - |
| Total Capital Contributions | \$ | 141,414 | \$ | 145,746 | \$ | 136,023 | \$ | $(4,332)$ | (3\%) | \$ | 9,723 | 7\% |

## CAPITAL ASSET ACTIVITY

During 2017 SAWS' total capital assets (net of accumulated depreciation) grew from $\$ 4.9$ billion to $\$ 5.1$ billion, while during 2016, net capital assets increased from $\$ 4.6$ billion to $\$ 4.9$ billion. Capital asset additions were $\$ 317.9$ million in 2017 and $\$ 385.6$ million in 2016. The graph below shows the additions for each year by general category.


SAWS is committed under various contracts for completion of construction or acquisition of capital assets totaling $\$ 369.9$ million as of December 31, 2017. For further detail information on capital assets, refer to Note E.

## LONG-TERM DEBT ACTIVITY

In 2017, SAWS issued $\$ 190.5$ million in junior lien bonds in two transactions. The proceeds of the bonds, including premiums, were used to refund $\$ 200.5$ million in bonds and pay the cost of issuance. Additionally, SAWS issued $\$ 40$ million in commercial paper to provide funds for capital improvement projects.

In 2016, SAWS issued a total of $\$ 647.1$ million in bonds through six transactions. All bonds issued during 2016 were at the junior lien level. The proceeds of the bonds, including premiums, were used to refund $\$ 538.2$ million in bonds, including $\$ 155.4$ million of outstanding SAWS DSP debt; refund $\$ 9$ million of commercial paper; pay the cost of issuance; make deposits to the Reserve Fund; and provide $\$ 167.1$ million in funds for capital improvement projects. Additionally, SAWS issued $\$ 118.7$ million in commercial paper of which $\$ 88.7$ million was used to refund all outstanding SAWS DSP flexible rate notes and $\$ 30$ million was used 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 January 2017, 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 June and July 2015 based on new revolving credit agreements with Bank of Tokyo-Mitsubishi UFJ, Ltd., acting through its New York branch, and Wells Fargo Bank, N.A. For additional information on the commercial paper program, refer to Note H.

BOND AND COMMERCIAL PAPER RATINGS


SAWS' bond ordinance requires the maintenance of a debt coverage ratio of at least 1.25 x the current annual debt service on outstanding senior lien debt. As of December 31, 2017 and 2016 SAWS was in compliance with the terms and provisions of the ordinances and documents related to its outstanding bonds and commercial paper.

| FINANCIAL RATIOS |  |  |  |
| :--- | :--- | :--- | :--- |
|  | 2017 | 2016 | 2015 |
| Current Year Debt Coverage $\ddagger$ : |  |  |  |
| $\quad$ Senior Lien Debt | 6.06 x | 3.88 x | 2.68 x |
| $\quad$ All Debt | 1.89 x | 1.74 x | 1.53 x |
| Maximum Annual Debt Coverage $\ddagger:$ |  |  |  |
| $\quad$ Senior Lien Debt | 4.30 x | 3.66 x | 2.31 x |
| $\quad$ All Debt | 1.89 x | 1.66 x | 1.45 x |
| Net Position Ratio |  |  |  |
| $\quad$ net position/ total liabilities + net position) | $46.4 \%$ | $43.6 \%$ | $42.5 \%$ |
| $\neq$ Debt service is net of federal interest subsidy. |  |  |  |

## ECONOMIC OUTLOOK FOR THE FUTURE

In December 2017 the San Antonio City Council approved rate increases projected to increase the bill of the average residential customer $5.8 \%$ effective January 1, 2018 and $4.7 \%$ effective January 1, 2019. In November 2015, City Council also pre-approved rate adjustments based on the average residential customer's bill in an
amount not to exceed $9.9 \%$ for 2020 to support the continued development of additional water supplies, including the Vista Ridge project.

Customer connections grew $1.6 \%$ in 2017 and $1.7 \%$ in 2016. 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 could require rate adjustments in the future in addition to those adjustments already approved by City Council.

## 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:

Mary Bailey<br>Vice President - Accounting \& Business Planning<br>Email: Mary.Bailey@saws.org<br>Douglas P. Evanson<br>Sr.Vice President/Chief Financial Officer<br>Email: Doug.Evanson@saws.org<br>Mailing address:<br>San Antonio Water System<br>PO Box 2449<br>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)


The accompanying notes to financial statements form an integral part of this statement.

## San Antonio Water System <br> STATEMENTS OF NET POSITION (continued) <br> (amounts in thousands)

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| CURRENT LIABILITIES |  |  |  |  |
| Current Liabilities To Be Paid From Unrestricted Assets |  |  |  |  |
| Accounts payable | \$ | 36,012 | \$ | 45,376 |
| Customers' deposits |  | 14,135 |  | 13,381 |
| Accrued vacation payable |  | 5,422 |  | 5,451 |
| Accrued payroll and benefits |  | 4,775 |  | 4,138 |
| Accrued claims payable |  | 7,187 |  | 7,273 |
| Sundry payables and accruals |  | 1,638 |  | 1,638 |
| Total unrestricted current liabilities |  | 69,169 |  | 77,257 |
| Current Liabilities To Be Paid From Restricted Assets |  |  |  |  |
| Accrued interest payable |  | 15,624 |  | 16,390 |
| Payables under construction contracts |  | 41,902 |  | 42,550 |
| Commercial paper notes |  | 3,710 |  | 3,550 |
| Revenue bonds payable within one year |  | 84,875 |  | 83,040 |
| Total restricted current liabilities |  | 146,111 |  | 145,530 |
| Total Current Liabilities |  | 215,280 |  | 222,787 |
| NONCURRENT LIABILITIES |  |  |  |  |
| Accrued vacation payable |  | 4,122 |  | 3,402 |
| Net pension liability |  | 72,056 |  | 63,022 |
| Net OPEB obligation |  | 68,933 |  | 73,539 |
| Derivative instrument |  | 15,394 |  | 16,863 |
| Commercial paper notes |  | 274,350 |  | 238,060 |
| Revenue bonds payable after one year, net of unamortized premiums and discounts |  | 2,650,864 |  | 2,757,242 |
| Total Noncurrent Liabilities |  | 3,085,719 |  | 3,152,128 |
| TOTAL LIABILITIES |  | 3,300,999 |  | 3,374,915 |
| DEFERRED INFLOWS OF RESOURCES |  |  |  |  |
| Deferred inflows - pension |  | 2,328 |  | 2,793 |
| TOTAL LIABILITIES \& DEFERRED INFLOWS OF RESOURCES |  | 3,303,327 |  | 3,377,708 |
| NET POSITION |  |  |  |  |
| Net investment in capital assets |  | 2,217,283 |  | 2,106,957 |
| Restricted for operating reserve |  | 54,143 |  | 52,279 |
| Restricted for debt service |  | 59,719 |  | 60,396 |
| Restricted for debt service reserve |  | 56,364 |  | 56,016 |
| Restricted for construction |  | 188,227 |  | 150,198 |
| Unrestricted |  | 278,542 |  | 187,503 |
| TOTAL NET POSITION | \$ | 2,854,278 | \$ | 2,613,349 |

The accompanying notes to financial statements form an integral part of this statement.

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## San Antonio Water System <br> STATEMENTS OF REVENUES, EXPENSES <br> AND CHANGES IN NET POSITION

For the Years Ended December 31, (amounts in thousands)

| OPERATING REVENUES | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| Water delivery system | \$ | 202,264 | \$ | 190,913 |
| Water supply system |  | 202,143 |  | 185,037 |
| Wastewater system |  | 250,977 |  | 234,966 |
| Chilled water and steam system |  | 11,368 |  | 11,541 |
| Total operating revenues |  | 666,752 |  | 622,457 |
| OPERATING EXPENSES |  |  |  |  |
| Salaries and fringe benefits |  | 148,058 |  | 142,315 |
| Contractual services |  | 168,350 |  | 170,845 |
| Material and supplies |  | 23,159 |  | 21,959 |
| Other charges |  | 11,150 |  | 12,702 |
| Less costs capitalized to construction in progress |  | $(32,275)$ |  | $(32,426)$ |
| Total operating expenses before depreciation |  | 318,442 |  | 315,395 |
| Depreciation expense |  | 152,072 |  | 142,856 |
| Total operating expenses |  | 470,514 |  | 458,251 |
| Operating income |  | 196,238 |  | 164,206 |
| NONOPERATING REVENUES |  |  |  |  |
| Interest earned and miscellaneous |  | 10,407 |  | 8,146 |
| NONOPERATING EXPENSES |  |  |  |  |
| Interest expense |  | 86,615 |  | 86,566 |
| Debt issue costs |  | 1,385 |  | 4,716 |
| Other finance charges |  | 2,697 |  | 2,121 |
| Gain on sale of capital assets |  | (951) |  | $(3,087)$ |
| Payments to the City of San Antonio |  | 17,276 |  | 14,228 |
| Payments to other entities |  | 108 |  | 109 |
| Total nonoperating expenses |  | 107,130 |  | 104,653 |
| Increase in net position, before capital contributions |  | 99,515 |  | 67,699 |
| Capital contributions |  | 141,414 |  | 145,746 |
| CHANGE IN NET POSITION |  | 240,929 |  | 213,445 |
| NET POSITION, BEGINNING OF YEAR |  | 2,613,349 |  | 2,399,904 |
| NET POSITION, END OF YEAR | \$ | 2,854,278 | \$ | 2,613,349 |

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)| CASH FLOWS FROM OPERATING ACTIVITIES | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Cash received from customers | \$ | 655,310 | \$ | 618,134 |
| Cash paid to vendors for operations |  | $(193,126)$ |  | $(191,712)$ |
| Cash paid to employees for services |  | $(126,581)$ |  | (122,649) |
| Net cash provided by operating activities |  | 335,603 |  | 303,773 |
| CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES |  |  |  |  |
| Payments to the City of San Antonio |  | $(12,075)$ |  | $(9,749)$ |
| Payments to other entities |  | (107) |  | (108) |
| Net cash used for noncapital financing activities |  | $(12,182)$ |  | $(9,857)$ |
| CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES |  |  |  |  |
| Proceeds from sale of capital assets |  | 1,125 |  | 5,315 |
| Proceeds from capital recovery fees |  | 72,846 |  | 67,991 |
| Proceeds from contributions in aid of construction |  | 7,925 |  | 3,866 |
| Payments to employees for construction of plant |  | $(21,633)$ |  | $(20,931)$ |
| Payments to vendors for construction of plant |  | $(10,643)$ |  | $(11,565)$ |
| Payments for acquisition of equipment and furniture |  | $(10,375)$ |  | $(8,584)$ |
| Payments for acquisition of property and plant |  | $(216,375)$ |  | $(264,300)$ |
| Proceeds from commercial paper |  | 40,000 |  | 118,700 |
| Payments for retirement of commercial paper |  | $(3,550)$ |  | $(3,395)$ |
| Payments to refund flexible rate bank notes |  | - |  | $(88,700)$ |
| Proceeds from revenue bonds |  | 2,112 |  | 172,518 |
| Payments for retirement of revenue bonds |  | $(82,840)$ |  | $(78,570)$ |
| Payments of interest on commercial paper |  | $(4,875)$ |  | $(4,336)$ |
| Payments of interest on revenue bonds |  | $(106,424)$ |  | $(107,775)$ |
| Payments for bond related expenses |  | $(1,385)$ |  | $(4,716)$ |
| Payments for bank charges |  | $(2,660)$ |  | $(2,130)$ |
| Net cash used for capital and related financing activities |  | $(336,752)$ |  | $(226,612)$ |
| CASH FLOWS FROM INVESTING ACTIVITIES |  |  |  |  |
| Purchase of investments |  | $(856,812)$ |  | $(986,499)$ |
| Maturity of investments |  | 831,638 |  | 787,174 |
| Investment income and other |  | 11,470 |  | 7,956 |
| Net cash used for investing activities |  | $(13,704)$ |  | $(191,369)$ |
| NET DECREASE IN CASH AND CASH EQUIVALENTS |  | $(27,035)$ |  | $(124,065)$ |
| CASH AND CASH EQUIVALENTS, AT BEGINNING OF YEAR |  | 156,736 |  | 280,801 |
| CASH AND CASH EQUIVALENTS, AT END OF YEAR | \$ | 129,701 | \$ | 156,736 |

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)
```



## RECONCILIATION OF OPERATING INCOME TO NET CASH PROVIDED BY OPERATING ACTIVITIES

Operating Income
Adjustments to reconcile operating income to net cash provided by operating activities:

Non-cash revenues from City of San Antonio
Provision for uncollectible accounts
Charge-off of prior year construction expenditures to operating expense Depreciation expense

Change in assets, deferred outflows of resources, liabilities and deferred inflows of resources:

Increase in accounts receivable
Decrease in other current asset
Increase in deferred outflows - pension
Decrease in accounts payable
Increase in customers' deposits
Increase in accrued vacation payable
Increase in accrued payroll and benefits
Increase/(decrease) in claims payables
Increase in sundry payables and accruals
Increase in net pension liability
Decrease in net OPEB obligation
Decrease in deferred inflows - pension
Total adjustments

Net cash provided by operating activities

## NONCASH CAPITAL, FINANCING AND INVESTING ACTIVITIES

Plant contributions received from developers
Accrued but unpaid liabilities related to capital acquisitions
Unrealized loss on investments
Bond proceeds deposited into an escrow account for purposes of refunding:
Revenue Bonds
Commercial Paper
Noncash payments to City of San Antonio
Total noncash capital and financing activities
$\$ \quad 196,238 \quad \$ \quad 164,206$

| $(5,202)$ | $(4,480)$ |
| ---: | ---: |
| 3,860 | 4,359 |
| 1,663 | 2,144 |
| 152,072 | 142,856 |


|  | $(9,923)$ |  | $(5,320)$ |
| :---: | :---: | :---: | :---: |
|  | 220 |  | 1,602 |
|  | $(5,313)$ |  | $(12,032)$ |
|  | $(3,971)$ |  | $(3,684)$ |
|  | 754 |  | 910 |
|  | 691 |  | 47 |
|  | 637 |  | 881 |
|  | (86) |  | 2,486 |
|  | - |  | 205 |
|  | 9,034 |  | 20,394 |
|  | $(4,606)$ |  | $(6,811)$ |
|  | (465) |  | $(3,990)$ |
|  | 139,365 |  | 139,567 |
| \$ | 335,603 | \$ | 303,773 |


| $\$$ | 60,643 | $\$$ | 73,889 |
| ---: | ---: | ---: | ---: |
| 41,902 |  | 42,550 |  |
| 1,774 |  | 56 |  |
|  |  |  |  |
|  | 202,495 |  | 565,219 |
|  | - |  | 9,000 |
|  | 5,202 |  | 4,480 |
|  | 312,016 | $\$$ | 695,138 |

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# San Antonio Water System Fiduciary Funds <br> STATEMENTS OF FIDUCIARY NET POSITION <br> (amounts in thousands) 

|  | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| ASSETS |  |  |  |  |
| Cash and cash equivalents | \$ | 1,733 | \$ | 891 |
| Employer contributions receivable |  | - |  | 1,067 |
| Investments, at fair value |  |  |  |  |
| Mutual funds - stock |  | 168,814 |  | 144,472 |
| Mutual funds - bonds |  | 103,297 |  | 78,204 |
| Other investments |  | 1,765 |  | 1,639 |
| Total Investments |  | 273,876 |  | 224,315 |
| TOTAL ASSETS |  | 275,609 |  | 226,273 |
| LIABILITIES |  | - |  | - |
| NET POSITION RESTRICTED FOR POST |  |  |  |  |
| EMPLOYMENT BENEFITS | \$ | 275,609 | \$ | 226,273 |

## STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

For the years ended December 31,
(amounts in thousands)

|  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
| ADDITIONS |  |  |  |  |
| Employer contributions | \$ | 22,890 | \$ | 23,583 |
| Participant contributions |  | 3,147 |  | 2,954 |
| Investment income, net of investment expense |  | 39,033 |  | 10,132 |
| Total additions |  | 65,070 |  | 36,669 |
| DEDUCTIONS |  |  |  |  |
| Benefit payments |  | 15,189 |  | 15,601 |
| Administrative expenses |  | 545 |  | 327 |
| Total deductions |  | 15,734 |  | 15,928 |
| NET INCREASE IN NET POSITION |  | 49,336 |  | 20,741 |
| NET POSITION RESTRICTED FOR POST |  |  |  |  |
| EMPLOYMENT BENEFITS - BEGINNING |  | 226,273 |  | 205,532 |
| NET POSITION RESTRICTED FOR POST |  |  |  |  |
| EMPLOYMENT BENEFITS - ENDING | \$ | 275,609 | \$ | 226,273 |

The accompanying notes to financial statements form an integral part of these statements.
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## 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 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 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.

The City of San Antonio, Texas (the City) currently manages a storm water system. The City has not incorporated the storm water system within SAWS; however, SAWS administers certain aspects of the storm water program on behalf of the City, including billing accounts and providing certain technical services, for a fee.

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. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not Within the Scope of GASB Statement 68, and Amendments to Certain Provision of GASB Statements 67 and 68. The portions of the this Statement that apply to SAWS relate to:
- accounting and reporting for defined contribution pensions, and
- information to be provided for investment factors that significantly affect trends in the amounts reported in required supplementary information for pensions
Pension expense and related disclosures for the defined contribution portion of SAWSRP found in Note J as well as information provided in required supplemental information are in accordance with the requirements of this Statement. There was no effect on the 2016 financial statements as a result of implementing this Statement.
- GASB Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans. This Statement replaces Statements No. 43, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans, as amended, and No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans. SAWS fiduciary financial statements and related note disclosures for SAWS OPEB Plan have been prepared in accordance with this Statement. As a result of implementing this Statement in 2017, the fiduciary financial statements for 2016 were restated to include OPEB payments made directly by SAWS outside of the OPEB trust as both employer contributions and benefit payments. There was no impact on Net Position Restricted for Post-Employment Benefits at December 31, 2016.
- GASB Statement No. 80, Blending Requirements for Certain Component Units - an Amendment of GASB Statement 14. This Statement amends the blending requirements for the financial statement presentation of component units of all state and local governments. The guidance provided by this Statement has no current impact for SAWS.
- GASB Statement No. 81, Irrevocable Split-Interest Agreements. This Statement provides recognition and measurement guidance for situations in which a government is a beneficiary of an irrevocable split-interest agreement. The guidance provided by this Statement has no current impact for SAWS.
- GASB Statement No. 82, Pension Issues, an Amendment of GASB Statements No. 67, No. 68 and No. 73. This Statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. The information presented in the financial statements, including notes and required supplementary information is in accordance with this statement. There was no effect on the 2016 financial statements as a result of implementing this Statement.
- GASB Statement No. 84, Fiduciary Activities. This Statement establishes criteria for identifying fiduciary activities of all state and local governments. Activity meeting the criteria should be reported in a fiduciary fund in the basic financial statements. Governments with activities meeting the criteria should present a statement of fiduciary net position and a statement of changes in fiduciary net position. The Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position include all fiduciary activities of SAWS.
- GASB Statement No. 85, Ommibus 2017. The objective of this Statement is to address issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). The information presented in the financial statements, including notes and required supplementary information is in accordance with this Statement.

The additional GASB pronouncements noted below will be implemented in the future. Once implemented, application of these standards may restate portions of these financial statements.

- GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. This Statement replaces the requirements of Statement No. 45, Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions, as amended, Statement No. 57, OPEB Measurements by Agent Employers and Agent Multiple-Employer Plans, for OPEB, and Statement No. 74, Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans and establishes new accounting and financial reporting requirements for OPEB plans. This Statement is effective for fiscal years beginning after June 15, 2017. SAWS will implement this Statement in 2018.
- 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. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. SAWS will implement this Statement in 2019.
- GASB Statement No. 86, Certain Debt Extinguishment Issues. This Statement provides guidance for in-substance defeasance of debt in which cash and other monetary assets acquired with only existing resources-resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the sole purpose of
extinguishing debt. In financial statements using the economic resources measurement focus, governments should recognize any difference between the reacquisition price (the amount required to be placed in the trust) and the net carrying amount of the debt defeased in substance using only existing resources as a separately identified gain or loss in the period of the defeasance. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017. SAWS will implement this Statement in 2018.
- 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 June 15, 2019. SAWS will implement this Statement in 2020.

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 nonoperating 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.

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; noload 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 $\$ 1.5$ million in 2017 and $\$ 3.9$ million in 2016. A provision to increase the allowance for uncollectible accounts is recorded as an offset to operating revenue. The provision for uncollectible accounts was $\$ 3.9$ million in 2017 and $\$ 4.4$ million in 2016.

Inventory: Inventories are valued at the lower of weighted average cost or market. Inventories are reported in the Statements of Net Position in Other Current Assets. Inventories totaled $\$ 5.6$ million at December 31, 2017 and $\$ 5.1$ million at December 31, 2016.

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, direct internal costs, and interest capitalized 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 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. 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: Interest expense during the construction period is capitalized as part of the cost of capital assets. SAWS capitalized $\$ 6$ million of interest in 2017 and $\$ 7.3$ million in 2016.

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 $\$ 4,377,000$
in 2017 and $\$ 4,508,000$ in 2016. 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 - 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.

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.

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. Sick leave is not accrued as a terminating employee is not paid for accumulated sick leave.

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 Instruments: 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. Currently SAWS pays $2.7 \%$ of Gross Revenues to the City. 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, 2017 and 2016.

| (amounts in thousands) | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Reported in Statements of Net Position: |  |  |  |  |
| Cash and Cash Equivalents: |  |  |  |  |
| Unrestricted | \$ | 36,688 | \$ | 54,045 |
| Restricted - current |  | 350 |  | 2,450 |
| Restricted - noncurrent |  | 92,663 |  | 100,241 |
| Total cash and cash equivalents |  | 129,701 |  | 156,736 |
| Investments: |  |  |  |  |
| Unrestricted |  | 349,074 |  | 256,919 |
| Restricted - current |  | 171,038 |  | 169,165 |
| Restricted - noncurrent |  | 275,145 |  | 345,773 |
| Total investments |  | 795,257 |  | 771,857 |
| Total Cash, Cash Equivalents and Investments | \$ | 924,958 | \$ | 928,593 |
| Reported amounts in note for: |  |  |  |  |
| Deposits | \$ | 35,258 | \$ | 31,959 |
| Investments |  | 889,700 |  | 896,634 |
| Total Deposits and Investments | \$ | 924,958 | \$ | 928,593 |

Deposits: As of December 31, 2017, SAWS' funds are deposited in demand and savings accounts at Frost Bank, 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, 2017 and 2016, the collateral pledged was held by the Federal Reserve Bank of Boston under SAWS' name so SAWS incurred no custodial credit risk. At December 31, 2017, the bank balance of SAWS' demand and savings accounts was $\$ 10,955,000$ and the reported amount was $\$ 35,258,000$ which included $\$ 29,000$ of cash on hand. The primary reason for the difference between the bank balance and the reported balance relates to two investments totaling $\$ 23,021,000$ that matured on December 31,

2017 but were not posted as by the bank until January 2, 2018. At December 31, 2016, the bank balance of SAWS' demand and savings accounts was $\$ 33,189,000$ and the reported amount was $\$ 31,959,000$ which included $\$ 29,000$ of cash on hand.

Investments: As of December 31, 2017, investments include securities issued by the United States government and its agencies and instrumentalities along with funds held in money market funds. Securities issued by the U.S. government and its agencies and instrumentalities are held in safekeeping by SAWS' depository bank, Frost Bank and registered as securities of SAWS. Money Market Funds are managed by Frost Bank, US Bank, 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. TexPool Prime 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)

The following tables provide information related to SAWS investments at December 31, 2017 and 2016.

| December 31, 2017 <br> (dollars in thousands) <br> Investment Type | Reported Value |  | Fair Value |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Allocation Based on Fair Value |  <br> Poors Rating | Weighted <br> Averge <br> Maturity <br> (in days) |
| U.S. Treasury Securities | \$ | 178,534 |  |  | \$ | 178,523 | 20\% | AA+ | 279 |
| U.S. Agency Notes |  | 616,724 |  | 616,574 | 69\% | $\mathrm{AA}+/ \mathrm{A}-1+$ | 285 |
| Money Market Mutual Funds held in Escrow: |  |  |  |  |  |  |  |
| Bank of New York Mellon |  | 20,356 |  | 20,356 | 2\% | AAAm | 1 |
| US Bank-Fidelity MMF |  | 8,281 |  | 8,281 | 1\% | AAAm | 1 |
| Frost Bank |  | 525 |  | 525 | 0\% | AAAm | 1 |
| Texpool Prime Local Government Pool |  | 65,280 |  | 65,280 | 7\% | AAAm | 1 |
| Total Investments | \$ | 889,700 | \$ | 889,539 | 100\% |  | 254 |


| December 31, 2016 <br> (dollars in thousands) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Type |  | orted <br> alue |  | Value | Allocation Based on Fair Value |  <br> Poors Rating | Weighted <br> Averge <br> Maturity <br> (in days) |
| U.S. Treasury Securities | \$ | 198,216 | \$ | 198,202 | 22\% | AA+ | 219 |
| U.S. Agency Notes |  | 579,640 |  | 579,513 | 65\% | AA+/A-1+ | 156 |
| Money Market Mutual Funds held in Escrow: |  |  |  |  |  |  |  |
| Bank of New York Mellon |  | 37,042 |  | 37,042 | 4\% | AAAm | 1 |
| US Bank-Fidelity MMF |  | 25,860 |  | 25,860 | 3\% | AAAm | 1 |
| Frost Bank |  | 55,876 |  | 55,876 | 6\% | AAAm | 1 |
| Total Investments | \$ | 896,634 | \$ | 896,493 | 100\% |  | 150 |

Interest Rate Risk: 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, 2017 the longest remaining maturity for any investment was slightly over four years and $73 \%$ of the investment portfolio matures in less than one year.

Credit Risk: 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: 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.

As of December 31, 2017 and 2016, SAWS the percentage of the investment portfolio for government-sponsored issuers was as follows:

|  | December 31, |  |  |
| :--- | :---: | :---: | :---: |
|  | 2017 | 2016 |  |
|  | $32 \%$ |  | $30 \%$ |
| Federal Home Loan Bank |  |  | $9 \%$ |
| Federal National Mortgage Association |  | $15 \%$ |  |
| Federal Home Loan Mortgage Corporation | $11 \%$ |  | $17 \%$ |
| Federal Farm Credit Bank | $11 \%$ |  | $3 \%$ |
| Federal Agricultural Mortgage Corporation | $0 \%$ |  | $6 \%$ |

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, 2017 and 2016.

| (amounts in thousands) | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ |  | Fair Value Measurements Using |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Level 1 |  | Level 2 |  | Level 3 |  |
| Investments by fair value level |  |  |  |  |  |  |  |  |
| U.S. Treasury Securities | \$ | 178,523 | \$ | - | \$ | 178,523 | \$ | - |
| U.S. Agency Notes |  | 616,574 |  | - |  | 616,574 |  | - |
| Total investments measured at fair value |  | 795,097 | \$ | - | \$ | 795,097 | \$ | - |
| Investments measured at net asset value (NAV) |  |  |  |  |  |  |  |  |
| Money Market Mutual Funds |  | 29,162 |  |  |  |  |  |  |
| Texpool Prime Local Government Pool |  | 65,280 |  |  |  |  |  |  |
| Total invesments measured at NAV |  | 94,442 |  |  |  |  |  |  |
| Total investments at fair value and NAV | \$ | 889,539 |  |  |  |  |  |  |
| (amounts in thousands) | December 31, |  | Fair Value Measurements Using |  |  |  |  |  |
|  |  | 2016 |  |  |  | vel 2 |  |  |
| Investments by fair value level |  |  |  |  |  |  |  |  |
| U.S. Treasury Securities | \$ | 198,202 | \$ | - | \$ | 198,202 | \$ | - |
| U.S. Agency Notes |  | 579,513 |  | - |  | 579,513 |  | - |
| Total investments measured at fair value |  | 777,715 | \$ | - | \$ | 777,715 | \$ | - |
| Investments measured at net asset value (NAV) |  |  |  |  |  |  |  |  |
| Money Market Mutual Funds |  | 118,778 |  |  |  |  |  |  |
| Total investments at fair value and NAV | \$ | 896,493 |  |  |  |  |  |  |

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, 2017 and 2016.

| (amounts in thousands) | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Restricted for: |  |  |  |  |
| Operations | \$ | 54,143 | \$ | 52,279 |
| Debt Service |  | 75,343 |  | 76,786 |
| Debt Service Reserve |  | 88,944 |  | 88,402 |
| Construction - accrued liabilities |  | 41,902 |  | 42,550 |
| Construction - capital recovery fees |  | 188,227 |  | 150,198 |
| Construction - bond proceeds |  | 90,637 |  | 207,414 |
| Total Restricted Cash \& Investments | \$ | 539,196 | \$ | 617,629 |

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, 2017 and 2016 based on the allocation of the funds between junior lien and senior lien bond requirements.

| (amounts in thousands) | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Deposits | \$ | 12,984 | \$ | 48 |
| Restricted for Junior Lien Bonds |  | 13,185 |  | 20,901 |
| Restricted for Senior Lien Bonds |  | 62,775 |  | 67,453 |
| Total Cash \& Investments - Debt Service Reserve | \$ | 88,944 | \$ | 88,402 |

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.

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 San Antonio Water System Retiree Health Trust (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, 2017 and 2016.

| December 31, 2017 <br> (dollars in thousands) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Type | SAWSRP |  | DSPRP |  | SAWS OPEB Plan |  | Total All Plans |  | Allocation Based on Fair Value |
| Collective, Pooled \& Mutual Funds: |  |  |  |  |  |  |  |  |  |
| Domestic Equity | \$ | 126,660 | \$ | 3,420 | \$ | 26,778 | \$ | 156,858 | 56.9\% |
| International Equity |  | 2 |  | 135 |  | 8,686 |  | 8,823 | 3.2\% |
| Domestic Debt |  | 81,597 |  | 386 |  | 21,314 |  | 103,297 | 37.5\% |
| Balanced/Asset Allocation |  | 3,133 |  | - |  | - |  | 3,133 | 1.1\% |
| Commodities |  | - |  | 69 |  | - |  | 69 | 0.0\% |
| Money Market Mutual Funds |  | - |  | - |  | 1,733 |  | 1,733 | 0.6\% |
| Standard Insurance Company: |  |  |  |  |  |  |  |  |  |
| Guaranteed Long-term Fund |  | - |  | 1,696 |  | - |  | 1,696 | 0.6\% |
| Total Investments | \$ | 211,392 | \$ | 5,706 | \$ | 58,511 | \$ | 275,609 | 100.0\% |


| December 31, 2016 (dollars in thousands) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Investment Type | SAWSRP |  | DSPRP |  | SAWS OPEB Plan |  | Total All Plans |  | Allocation Based on Fair Value |
| Collective, Pooled \& Mutual Funds: |  |  |  |  |  |  |  |  |  |
| Domestic Equity | \$ | 112,979 | \$ | 3,225 | \$ | 20,216 | \$ | 136,420 | 60.6\% |
| International Equity |  | - |  | 115 |  | 6,444 |  | 6,559 | 2.9\% |
| Domestic Debt |  | 61,296 |  | 431 |  | 16,477 |  | 78,204 | 34.7\% |
| Balanced/Asset Allocation |  | 1,493 |  | - |  | - |  | 1,493 | 0.7\% |
| Commodities |  | - |  | 78 |  | - |  | 78 | 0.0\% |
| Money Market Mutual Funds |  | - |  | - |  | 891 |  | 891 | 0.4\% |
| Standard Insurance Company: |  |  |  |  |  |  |  |  |  |
| Guaranteed Long-term Fund |  | - |  | 1,561 |  | - |  | 1,561 | 0.7\% |
| Total Investments | \$ | 175,768 | \$ | 5,410 | \$ | 44,028 | \$ | 225,206 | 100.0\% |

All fiduciary fund investments are reported at net asset value at December 31, 2017 and 2016. Money market funds are reported as Cash and Cash Equivalents in the Statements of Fiduciary Net Position.

Fiduciary Fund investments are not subject to the Public Funds Investment Act. The investments are subject to the following risks:

Credit Risk: Credit Risk is the risk that an issuer will not fulfill its obligations. The individual investments held by the Collective, Pooled and Mutual funds at December 31, 2017 and December 31, 2016 were not rated. The Standard Insurance Company Guaranteed Long-term Fund had a rating of A- by Standard \& Poors at December 31, 2017 and 2016.

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. As of December 31, 2017 and 2016, more than $99 \%$ of fiduciary fund investments were in collective, pooled and mutual funds. The following funds exceeded $5 \%$ of fiduciary net position at December 31, 2017 and 2016.

- Principal LDI Intermediate Duration Separate Account - Z
- Principal LDI Long Term Duration Separate Account - Z
- Principal Extended Duration Separate Account - Z
- Principal LargeCap S\&P 500 Index Fund

Interest Rate Risk: Interest rate risk is the risk that changes in interest rates of fixed income securities will adversely affect the fair value of an investment. The effective duration of the debt funds was 15.3 years at December 312017 and 15 years at December 31, 2016. The Standard Insurance Company Guaranteed Long-term Fund had an effective duration of 5.0 years at December 31, 2017 and December 31, 2016.

## NOTE D - ACCOUNTS RECEIVABLE

Accounts receivable consisted of the following at December 31, 2017 and 2016:


Current:
Receivable from customers
Unbilled revenue
Receivable from other governmental agencies
Less: Allowance for doubtfull accounts

Noncurrent:
Receivable from other governmental agencies
Total accounts receivable

| 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: |
| \$ | 53,449 | \$ | 44,716 |
|  | 27,274 |  | 25,298 |
|  | 1,872 |  | 2,881 |
|  | $(8,217)$ |  | $(5,868)$ |
|  | 74,378 |  | 67,027 |


|  | 1,343 |  |  |
| ---: | ---: | ---: | ---: |
|  |  |  | 2,631 |
| $\$$ | 75,721 |  |  |
|  |  |  |  |
|  |  |  |  |

In connection with a settlement agreement, Lower Colorado River Authority (LCRA) is required to make eight annual payments of $\$ 1.4$ million to SAWS beginning November 1, 2012 through November 1, 2019. The discounted value of the payments to be received from LCRA in the future is reported in accounts receivable, of which $\$ 1.3$ million and $\$ 2.6$ million was classified as noncurrent at December 31, 2017 and 2016, respectively.

NOTE E - CAPITAL ASSETS
A summary of capital asset activity for the year ended December 31, 2017 is as follows:

| (amounts in thousands) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December 31, 2016 |  | Increases |  | Transfers |  | Decreases |  | December 31, 2017 |  |
| Capital Assets, not being depreciated: |  |  |  |  |  |  |  |  |  |  |
| Land | \$ | 101,074 | \$ | - | \$ | 5,959 | \$ | 38 | \$ | 106,995 |
| Water rights purchased |  | 248,677 |  | - |  | - |  | - |  | 248,677 |
| Other intangible assets |  | 370 |  | - |  | - |  | - |  | 370 |
| Construction in progress |  | 228,595 |  | 309,263 |  | $(203,560)$ |  | 1,663 |  | 332,635 |
| Total capital assets, not being depreciated/amortized |  | 578,716 |  | 309,263 |  | $(197,601)$ |  | 1,701 |  | 688,677 |
| Capital assets, being depreciated |  |  |  |  |  |  |  |  |  |  |
| Structures and improvements |  | 872,002 |  | 54 |  | 118,331 |  | 153 |  | 990,234 |
| Pumping and purification equipment |  | 336,421 |  | 515 |  | $(89,861)$ |  | 160 |  | 246,915 |
| Distribution and transmission system |  | 2,623,479 |  | 2 |  | 837 |  | - |  | 2,624,318 |
| Treatment facilties |  | 2,186,893 |  | - |  | 70,379 |  | 27 |  | 2,257,245 |
| Equipment and machinery |  | 185,956 |  | 7,814 |  | 104,348 |  | 4,522 |  | 293,596 |
| Furniture and fixtures |  | 6,124 |  | - |  | 471 |  | - |  | 6,595 |
| Computer equipment |  | 31,324 |  | 1,418 |  | $(7,713)$ |  | 491 |  | 24,538 |
| Software |  | 52,915 |  | 529 |  | 809 |  | 7,066 |  | 47,187 |
| Other intangible assets |  | 1,354 |  | - |  | - |  | - |  | 1,354 |
| Total capital assets being depreciated/amortized |  | 6,296,468 |  | 10,332 |  | 197,601 |  | 12,419 |  | 6,491,982 |
| Less accumulated depreciation |  |  |  |  |  |  |  |  |  |  |
| Structures and improvements |  | $(235,680)$ |  | $(23,020)$ |  | - |  | (153) |  | $(259,147)$ |
| Pumping and purification equipment |  | $(62,288)$ |  | $(7,998)$ |  | - |  | (34) |  | $(70,252)$ |
| Distribution and transmission system |  | $(776,744)$ |  | $(47,299)$ |  | - |  | - |  | $(824,043)$ |
| Treatment facilties |  | $(746,566)$ |  | $(47,640)$ |  | - |  | (27) |  | $(794,179)$ |
| Equipment and machinery |  | $(113,455)$ |  | $(18,631)$ |  | - |  | $(4,522)$ |  | $(127,564)$ |
| Furniture and fixtures |  | $(5,945)$ |  | (120) |  | - |  | - |  | $(6,065)$ |
| Computer equipment |  | $(17,370)$ |  | $(2,200)$ |  | - |  | (491) |  | $(19,079)$ |
| Software |  | $(30,603)$ |  | $(4,495)$ |  | - |  | $(7,056)$ |  | $(28,042)$ |
| Other intangible assets |  | (442) |  | (69) |  | - |  | - |  | (511) |
| Total accumulated depreciation |  | $(1,989,093)$ |  | $(152,072)$ |  | - |  | $(12,283)$ |  | $(2,128,882)$ |
| Total capital assets, being |  |  |  |  |  |  |  |  |  |  |
| Capital assets, net | \$ | 4,886,091 | \$ | 167,523 | \$ | - | \$ | 1,837 | \$ | 5,051,777 |

A summary of capital asset activity for the year ended December 31, 2016 is as follows:

| (amounts in thousands) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December 31, 2015 |  | Increases |  | Transfers |  | Decreases |  | December 31, 2016 |  |
| Capital Assets, not being depreciated: |  |  |  |  |  |  |  |  |  |  |
| Land | \$ | 98,932 | \$ | - | \$ | 4,237 | \$ | 2,095 | \$ | 101,074 |
| Water rights purchased |  | 248,603 |  | - |  | 74 |  | - |  | 248,677 |
| Other intangible assets |  | 370 |  | - |  | - |  | - |  | 370 |
| Construction in progress |  | 485,962 |  | 376,916 |  | $(632,139)$ |  | 2,144 |  | 228,595 |
| Total capital assets, not being depreciated/amortized |  | 833,867 |  | 376,916 |  | $(627,828)$ |  | 4,239 |  | 578,716 |
| Capital assets, being depreciated |  |  |  |  |  |  |  |  |  |  |
| Structures and improvements |  | 790,159 |  | 2 |  | 82,970 |  | 1,129 |  | 872,002 |
| Pumping and purification equipment |  | 195,683 |  | 421 |  | 140,317 |  | - |  | 336,421 |
| Distribution and transmission system |  | 2,347,276 |  | - |  | 276,592 |  | 389 |  | 2,623,479 |
| Treatment facilties |  | 2,081,721 |  | - |  | 105,172 |  | - |  | 2,186,893 |
| Equipment and machinery |  | 176,712 |  | 5,753 |  | 11,838 |  | 8,347 |  | 185,956 |
| Furniture and fixtures |  | 6,133 |  | - |  | - |  | 9 |  | 6,124 |
| Computer equipment |  | 21,479 |  | 2,017 |  | 8,221 |  | 393 |  | 31,324 |
| Software |  | 53,078 |  | 424 |  | 2,718 |  | 3,305 |  | 52,915 |
| Other intangible assets |  | 1,354 |  | - |  | - |  | - |  | 1,354 |
| Total capital assets being depreciated/amortized |  | 5,673,595 |  | 8,617 |  | 627,828 |  | 13,572 |  | 6,296,468 |
| Less accumulated depreciation |  |  |  |  |  |  |  |  |  |  |
| Structures and improvements |  | $(216,088)$ |  | $(20,588)$ |  | - |  | (996) |  | $(235,680)$ |
| Pumping and purification equipment |  | $(55,101)$ |  | $(7,187)$ |  | - |  | - |  | $(62,288)$ |
| Distribution and transmission system |  | $(728,675)$ |  | $(48,458)$ |  | - |  | (389) |  | $(776,744)$ |
| Treatment facilties |  | $(701,287)$ |  | $(45,279)$ |  | - |  | - |  | $(746,566)$ |
| Equipment and machinery |  | $(107,483)$ |  | $(14,319)$ |  | - |  | $(8,347)$ |  | $(113,455)$ |
| Furniture and fixtures |  | $(5,228)$ |  | (26) |  | - |  | (9) |  | $(5,945)$ |
| Computer equipment |  | $(15,443)$ |  | $(2,320)$ |  | - |  | (393) |  | $(17,370)$ |
| Software |  | $(29,298)$ |  | $(4,610)$ |  | - |  | $(3,305)$ |  | $(30,603)$ |
| Other intangible assets |  | (373) |  | (69) |  | - |  | - |  | (442) |
| Total accumulated depreciation |  | $(1,859,676)$ |  | $(142,856)$ |  | - |  | $(13,439)$ |  | $(1,989,093)$ |
| Total capital assets, being |  |  |  |  |  |  |  |  |  |  |
| Capital assets, net | \$ | 4,647,786 | \$ | 242,677 | \$ | - | \$ | 4,372 | \$ | 4,886,091 |

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 $\$ 1.7$ million in 2017 and $\$ 2.1$ million in 2016.

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, 2017 was $\$ 13.0$ 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 2017 and 2016 were as follows:

|  | (amounts in thousands) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Balance at Beginning of Year |  | Current-Year Accruals |  | Payments |  | Balance at End of Year |  | Estimated <br> Due Within <br> One Year |  |
| Year Ended <br> December 31, 2017 | \$ | 8,853 | \$ | 6,113 | \$ | $(5,422)$ | \$ | 9,544 | \$ | 5,422 |
| Year Ended <br> December 31, 2016 | \$ | 8,806 | \$ | 5,498 | \$ | $(5,451)$ | \$ | 8,853 | \$ | 5,451 |

## 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 $\$ 325,000$ of medical claims per person during 2017 and $\$ 300,000$ during 2016.

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 <br> Accruals |  | Payments |  | Balance at End of Year |  | Estimated Due Within One Year |  |
| Year Ended <br> December 31, 2017 | \$ | 7,273 | \$ | 22,586 | \$ | $(22,672)$ | \$ | 7,187 | \$ | 7,187 |
| Year Ended <br> December 31, 2016 | \$ | 4,787 | \$ | 28,063 | \$ | $(25,577)$ | \$ | 7,273 | \$ | 7,273 |
| Year Ended <br> December 31, 2015 | \$ | 7,054 | \$ | 21,796 | \$ | $(24,063)$ | \$ | 4,787 | \$ | 4,787 |

## 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 $\$ 84,705,000$ at December 31, 2017 and $\$ 88,255,000$ at December 31, 2016 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 $\$ 15,394,000$ at December 31, 2017 and negative $\$ 16,863.000$ at December 31, 2016. This value is based on Level 2 inputs in the fair value hierarchy using the zerocoupon 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 zerocoupon 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 $\$ 3,537,000$ at December 31, 2017 and $\$ 3,898,000$ at December 31, 2016.

Credit Risk: SAWS was not exposed to credit risk on its outstanding swap at December 31, 2016 and 2017 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 Aa3 by Moody's Investors Services, A+ by Standard and Poor's, and AA- by Fitch Ratings as of December 31, 2017. 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 is commercial paper notes. At December 31, 2017, $\$ 84,705,000$ of outstanding commercial paper with current maturities of approximately 32 days was hedged by the interest rate swap. The amount of commercial paper hedge at December 31, 2016 totaled $\$ 88,255,000$ with maturities of approximately 33 days. 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, 2017, 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 |  | $\begin{gathered} \text { Interest Paid } \\ \text { on Debt } \\ \hline \end{gathered}$ |  | Interest Rate Swap, Net |  | Total |  |
| 2018 | \$ | 3,710 | \$ | 896 | \$ | 2,031 | \$ | 6,637 |
| 2019 |  | 3,880 |  | 855 |  | 1,936 |  | 6,671 |
| 2020 |  | 4,055 |  | 811 |  | 1,838 |  | 6,704 |
| 2021 |  | 4,240 |  | 766 |  | 1,735 |  | 6,741 |
| 2022 |  | 4,435 |  | 718 |  | 1,627 |  | 6,780 |
| 2023-2027 |  | 25,405 |  | 2,795 |  | 6,334 |  | 34,534 |
| 2028-2032 |  | 31,740 |  | 1,233 |  | 2,793 |  | 35,766 |
| 2033 |  | 7,240 |  | 26 |  | 60 |  | 7,326 |
| Total | \$ | 84,705 | \$ | 8,100 | \$ | 18,354 | \$ | 111,159 |

## NOTE H - LONG TERM DEBT

## REVENUE BONDS

On February 28, 2017, SAWS issued $\$ 90,915,000$ City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 2017A (No Reserve Fund). The proceeds from the sale of the bonds were used to (i) refund the remaining City of San Antonio, Texas Water System Revenue Refunding Bonds, Series 2007 (Series 2007), (ii) refund a portion of the City of San Antonio, Texas Water System Junior Lien Revenue and Refunding Bonds, Series 2007A (Series 2007A), and (iii) pay the cost of issuance. The refunding of the Series 2007 and Series 2007A bonds reduced total future debt service payments by approximately $\$ 9.9$ million and resulted in an economic gain of $\$ 7.5$ 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 November 1, 2017, SAWS remarketed $\$ 99,590,000$ City of San Antonio, Texas Water System Variable Rate Junior Lien Revenue and Refunding Bonds, Series 2014B Bonds (No Reserve Fund). The proceeds from the sale of the bonds were used to (i) pay the principal of the maturity bonds, 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. There was no economic gain or loss on this transaction.

Senior lien water system revenue bonds, comprised of Series 2009, Series 2009B, Series 2010B, Series 2011, Series 2011A, Series 2012, and Series 2012A, outstanding in the amount of $\$ 742,025,000$ at December 31, 2017, 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 $3.000 \%$ to $6.220 \%$, 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. 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.

The junior lien fixed rate bonds, comprised of Series 2007, Series 2008, Series 2008A, Series 2009, Series 2009A, Series 2010, Series 2010A, Series 2011, Series 2011A, Series 2012 (No Reserve Fund), Series 2012, Series 2013A, Series 2013B (No Reserve Fund), Series 2013C, Series 2013D, Series 2013E (No Reserve Fund), Series 2014A (No Reserve Fund), Series 2014C, Series 2014D, Series 2015A, Series 2015B (No Reserve Fund), Series 2016A (No Reserve Fund), Taxable Series 2016B, Series 2016C (No Reserve Fund), Series 2016D, Series 2016E, and Series 2017A (No Reserve Fund), is outstanding in the amount of $\$ 1,597,110,000$ at December 31, 2017. Interest rates on the junior lien fixed rate bonds range from $0.000 \%$ to $5.000 \%$

The junior lien variable rate bonds, comprised of the Series 2013F (No Reserve Fund) (the Series 2013F Bonds) and the Series 2014B (No Reserve Fund) (the Series 2014B Bonds), are outstanding in the amount of $\$ 198,385,000$ at December 31, 2017. 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 interest rate period 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 interest rate period 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 $1.80 \%$.

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 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 $8.0 \%$.

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, 2017, SAWS has no arbitrage rebate liability associated with any outstanding bonds.

The following tables summarize revenue bond transactions for the years ended December 31, 2017 and 2016.

| (amounts in thousands) | $\begin{gathered} \text { Balance } \\ \text { January 1, } 2017 \\ \hline \end{gathered}$ |  | Additions |  | Reductions/ <br> Amortization |  | Balance <br> December 31, 2017 |  | Due Within One Year |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bonds Payable | \$ | 2,630,350 | \$ | 190,505 | \$ | 283,335 | \$ | 2,537,520 | \$ | 84,875 |
| Unamortized premium |  | 211,847 |  | 12,102 |  | 24,309 |  | 199,640 |  |  |
| Unamortized discount |  | $(1,915)$ |  | - |  | (494) |  | $(1,421)$ |  |  |
| Total Bonds Payable, Net | \$ | 2,840,282 | \$ | 202,607 | \$ | 307,150 | \$ | 2,735,739 | \$ | 84,875 |
| (amounts in thousands) |  | Balance <br> ry 1, 2016 |  | ditions |  | ctions/ rization |  | alance <br> ber 31, 2016 |  | Within <br> Year |
| Bonds Payable | \$ | 2,600,096 | \$ | 647,060 | \$ | 616,806 | \$ | 2,630,350 | \$ | 83,040 |
| Unamortized premium |  | 132,971 |  | 99,931 |  | 21,055 |  | 211,847 |  |  |
| Unamortized discount |  | $(2,704)$ |  | (254) |  | $(1,043)$ |  | $(1,915)$ |  |  |
| Total Bonds Payable, Net | \$ | 2,730,363 | \$ | 746,737 | \$ | 636,818 | \$ | 2,840,282 | \$ | 83,040 |

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<br>Revenue and Refunding Bonds<br>(amounts in thousands)

| Year Ended December 31, | Fixed Rate |  |  |  |  |  |  |  | Variable Rate |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Principal |  | Interest |  | Interest <br> $\underline{\text { Rate Subsidy } \ddagger}$ |  | Net Interest |  | Principal |  | Interest* |  |
| 2018 | \$ | 84,875 | \$ | 99,237 | \$ | 3,547 | \$ | 95,690 | \$ | - | \$ | 3,968 |
| 2019 |  | 85,930 |  | 96,451 |  | 3,481 |  | 92,970 |  | - |  | 3,968 |
| 2020 |  | 89,800 |  | 93,245 |  | 3,412 |  | 89,833 |  | - |  | 3,968 |
| 2021 |  | 94,425 |  | 89,461 |  | 3,336 |  | 86,125 |  | - |  | 3,968 |
| 2022 |  | 98,005 |  | 85,364 |  | 3,255 |  | 82,109 |  | - |  | 4,462 |
| 2023-2027 |  | 527,240 |  | 360,303 |  | 14,819 |  | 345,484 |  | - |  | 24,800 |
| 2028-2032 |  | 456,510 |  | 247,417 |  | 11,816 |  | 235,601 |  | 30,825 |  | 23,781 |
| 2033-2037 |  | 505,170 |  | 142,067 |  | 5,865 |  | 136,202 |  | 66,620 |  | 16,877 |
| 2038-2042 |  | 332,145 |  | 39,372 |  | 685 |  | 38,687 |  | 76,625 |  | 7,934 |
| 2043-2046 |  | 65,035 |  | 4,687 |  | - |  | 4,687 |  | 24,315 |  | 496 |
|  | \$ | 2,339,135 |  | 1,257,604 | \$ | 50,216 |  | 1,207,388 | \$ | 198,385 | \$ | 94,222 |

$\ddagger$ 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 30,2018 , reduced the BAB subsidy paid during the fiscal year by $6.6 \%$. The BABs 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 and October 31, 2022. Interest shown above is based on a $2.00 \%$ fixed rate through the fixed term and $2.50 \%$ 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 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 agreements is $\$ 450$ million with the Revolving Credit Agreement with Bank of Tokyo-Mitsubishi UFJ, Ltd in the amount of \$350 million, supporting the Series A Notes expiring October 4, 2018; 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., Ramirez \& Co., Inc., and Mitsubishi UFJ Securities (USA), Inc.
- Issuing and Paying Agency Agreement with The Bank of New York Mellon Trust Company, N.A.

Commercial paper notes of $\$ 278,060,000$ are outstanding as of December 31, 2017. Interest rates on the notes outstanding at December 31, 2017 range from $0.99 \%$ to $1.16 \%$ and maturities range from 32 to 180 days. The outstanding notes had an average rate of $1.08 \%$ and averaged 73 days to maturity.

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 $\$ 450$ 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 $\$ 3,710,000$ of commercial paper in 2018. Therefore, this portion of the commercial paper is classified as a current liability.

The following table summarizes transactions of the commercial paper program for the years ended December 31, 2017 and 2016.

|  | (amounts in thousands) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Outstanding <br> Notes at <br> Beginning of Year |  | Notes <br> Issued |  | Notes <br> Retired |  | Outstanding <br> Notes <br> at End <br> of Year |  | Payable Within One Year |  |
| Year Ended <br> December 31, 2017 | \$ | 241,610 | \$ | 40,000 | \$ | 3,550 | \$ | 278,060 | \$ | 3,710 |
| Year Ended <br> December 31, 2016 | \$ | 135,305 | \$ | 118,700 | \$ | 12,395 | \$ | 241,610 | \$ | 3,550 |

## 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 6.06 at December 31, 2017 and 3.88 at December 31, 2016.

## NOTE I - CONTINGENCIES AND COMMITMENTS

## Water Agreements

As of December 31, 2017, 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 2018 and others continuing until 2023. 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 $\$ 4.7$ million in 2017 and 2016. The future commitments under these leases are as follows:

| (dollars in thousands) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2019 |  | 2020 |  | 2021 |  | 2022 |  | Thereafter |  |
| Edwards Aquifer - lease payments | \$ | 4,456 | \$ | 3,232 | \$ | 2,873 | \$ | 2,674 | \$ | 2,101 | \$ | 564 |
| Edwards Aquifer - acre feet leased |  | 28,121 |  | 21,498 |  | 20,588 |  | 19,108 |  | 15,008 |  | 4,026 |

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 2018 is estimated to be 4,800 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 $\$ 970$ per acre foot in 2018 to approximately $\$ 1,451$ 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 $\$ 621$ to $\$ 764$ 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 2020. SAWS has a unilateral option to extend the contract through 2026. As part of this contract, SAWS agreed to make quarterly defined payments for any residential customers that are connected to the system within a defined geographical area that begin taking water service from SAWS. SAWS began making these payments during 2012 as the area has begun to experience some development. SAWS has made payments totaling $\$ 340,000$ for new customer connections under the terms of this contract. While it is impossible to estimate the exact amount of any potential future payments associated with this provision of the agreement, management estimate of this potential contingent liability is less than $\$ 5$ million.

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. 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 by WECO 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 $\$ 965$ in 2018 to $\$ 1,153$ 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 2018 and projects payments to landowners will be $\$ 1,134,000$. 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 its treatment plant in Guadalupe 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 $1 / 12^{\text {th }}$ 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 $\$ 499$ per acre foot in 2018 increasing to $\$ 636$ per acre foot by 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 wholesale water rates.

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, 2017 was $\$ 145$ per acre foot. The agreement has been amended several times with the current agreement being effective in 2008 and 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 2018, SAWS has committed to taking 5,300 acre feet with a projected cost of $\$ 1,391$ per acre foot.

Total payments under these water purchase agreements were $\$ 38.5$ million in 2017 and $\$ 41.9$ million in 2016. A summary of all estimated future payments under all 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) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2019 |  | 2020 |  | 2021 |  | 2022 |  | Thereafter |  |
| Purchased water payments - fixed | \$ | 22,110 | \$ | 22,290 | \$ | 22,687 | \$ | 22,822 | \$ | 23,238 | \$ | 600,395 |
| Acre feet purchased - fixed |  | 43,031 |  | 44,031 |  | 44,031 |  | 42,531 |  | 42,531 |  | 1,047,390 |
| Purchased water payments - variable | \$ | 14,928 | \$ | 15,032 | \$ | 15,144 | \$ | 14,718 | \$ | 14,834 | \$ | 97,905 |
| Acre feet purchased - variable |  | 15,962 |  | 15,786 |  | 15,614 |  | 14,944 |  | 14,779 |  | 90,157 |

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 (10 year) extension period under certain circumstances (hereinafter referred to as the "operational" phase). To produce and deliver the Project Water, Vista Ridge LLC will 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 and the pipeline, together, the "Project"). The pipeline will be 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.

The Project achieved financial close in November 2016 and is now in the construction phase. During this phase, Vista Ridge LLC will complete the construction of the Project and SAWS must construct any improvements necessary to accept and integrate Project Water. The anticipated capital cost of SAWS improvements was initially estimated at approximately $\$ 145$ million. As design of these improvements has not been completed, the potential cost of these improvements could materially differ from the initial estimate. The construction phase is scheduled to be completed in 2020 and will result in the commencement of the aforementioned 30-year operational phase, during which period 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.

Pursuant to the terms of the Agreement, SAWS will pay costs arising under the Agreement, as a maintenance and operating expense of the System for rate setting purposes, 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. 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 as a direct pass through under the Agreement and electricity cost (paid directly by SAWS to the utility providers). It is estimated that the water will initially cost approximately $\$ 2,000$ per acre foot, resulting in an estimated initial annual cost of approximately $\$ 100$ million for 50,000 acre feet of delivered water. Delivery of water from the Project is
expected to begin in 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.

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. The termination payment as of December 31, 2017 was estimated to be approximately $\$ 540$ million. The termination payment will continue to increase throughout the construction phase as additional funds are expended by the Project Company on the construction of the project. By the time the operational phase is reached in 2020 the termination payment could be as much as $\$ 1$ billion. 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 upon the termination of the Agreement and transfer of the Project to SAWS, and the cost of such water at the end of the Agreement will be tied to prevailing Edwards Aquifer leases.

## Other Contingencies and Commitments

SAWS is also committed under various contracts for completion of construction or acquisition of utility plant totaling approximately $\$ 369.9$ million as of December 31, 2017. Funding of this amount will come from excess revenues, contributions from developers, restricted assets and available commercial paper capacity.

In connection with desalination injection well permits obtained by SAWS from the Texas Commission on Environmental Quality (TCEQ), 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 an expected useful life of 50 years based on SAWS experience with other wells throughout the system. At December 31, 2017, SAWS has recorded a liability of $\$ 457,000$ related to this post-closure obligation based on the current projected cost to plug wells of similar size, depth and diameter.

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. 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 estimates the cost to perform the operating and maintenance requirements of the Consent Decree will 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.

Through December 31, 2017, capital expenditures related to the Consent Decree total $\$ 304$ million. Since entry into the Consent Decree, SAWS has performed its obligations under 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 193 in 2017.

SAWS operates the Mitchell Lake Site Wastewater Treatment Facility pursuant to a Texas Pollutant Discharge Elimination Permit (Permit) issued by the TCEQ under a delegation of authority from the EPA. On August 18, 2016 SAWS received an Administrative Order from EPA that alleges that 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, the Lake is a unique and environmentally sensitive facility that has become a wildlife refuge and an active tourist destination within San Antonio. The Lake surface area covers approximately 600 acres and provides an essential habitat where migrating birds can rest and feed. Discharges from the 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 two potential solutions: a) reconstructing the existing dam and spillway and b) constructing extensive treatment wetlands below the Lake. SAWS has hired a nationally recognized wetlands firm to develop and conduct a three year pilot wetlands program. This program will evaluate the viability of the proposed wetlands as a solution and, if appropriate, guide the optimization of potential full scale wetlands. Concurrently, improvements to the dam and spillway structures are being evaluated and cost projections are being developed.

SAWS will also continue to explore other treatment and operational alternatives and work with the EPA and TCEQ to develop an appropriate plan that ensures compliance with the Permit. At this time, SAWS does not know what actions may ultimately be required or the costs associated with those actions.

## 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 872 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 2017 and 2016 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,

|  | 2016 | 2015 |
| :---: | :---: | :---: |
| Active employees | 1,648 | 1,666 |
| Retirees and beneficiaries currently receiving benefits | 1,175 | 1,117 |
| Inactive members | 595 | 528 |
| Total | 3,418 | 3,311 |

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 $3.67 \%$ and $3.69 \%$ in calendar years 2017 and 2016, respectively. SAWS' contributions to TMRS totaled $\$ 3,852,000$ and $\$ 3,609,000$ for the years ended December 31, 2017 and 2016, respectively. These contributions equaled the required contributions.

SAWS Net Pension Liability for the TMRS plan as of December 31, 2017 and 2016 was measured as of December 31, 2016 and 2015, 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, 2016 and 2015 valuations included the following actuarial assumptions:

| Annual inflation | $2.50 \%$ |
| :--- | :--- |
| Annual wage 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 Table 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.

Actuarial assumptions used in the December 31, 2016 and 2015 valuations were based on the results of actuarial experience studies. The experience study in TMRS was for the period December 31, 2010 through December 31, 2014. Healthy post-retirement mortality rates and annuity purchase rates were updated based on a Mortality Experience Investigation Study covering 2009 through 2011, and dated December 31, 2013. These assumptions were first used in the December 31, 2013 valuation, along with a change to the Entry Age Normal (EAN) actuarial cost method. Assumptions are reviewed annually. 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, the plan actuary 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). At its meeting on July 30, 2015, the TMRS Board approved a new portfolio target allocation. The target allocation and best estimates of real rates of return for each major asset class for each of the actuarial valuations are summarized in the following table:

| Asset Class | December 31, 2016 |  | December 31, 2015 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Target Allocation | Long-term Expected Real Rate of Return | Target Allocation | Long-term Expected Real Rate of Return |
| Domestic Equity | 17.5\% | 4.55\% | 17.5\% | 4.55\% |
| International Equity | 17.5\% | 6.35\% | 17.5\% | 6.10\% |
| Core Fixed Income | 10.0\% | 1.00\% | 10.0\% | 1.00\% |
| Non-Core Fixed Income | 20.0\% | 4.15\% | 20.0\% | 3.65\% |
| Real Return | 10.0\% | 4.15\% | 10.0\% | 4.03\% |
| Real Estate | 10.0\% | 4.75\% | 10.0\% | 5.00\% |
| Absolute Return | 10.0\% | 4.00\% | 10.0\% | 4.00\% |
| Private Equity | 5.0\% | 7.75\% | 5.0\% | 8.00\% |
| Total | 100.0\% |  | 100.0\% |  |

The discount rate of $6.75 \%$ was used to measure the Total Pension Liability in the December 31, 2016 and 2015 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, 2017 and 2016 based on the measurement date of December 31, 2016 and 2015, respectively.


The following presents the Net Pension Liability for the TMRS plan as of December 31, 2017 and December 31, 2016 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 (\$ in thousands)

December 31, 2017
December 31, 2016

|  | $\overline{\text { crease }}$ $\%$ | $\begin{aligned} & \text { Current Discount Rate } \\ & 6.75 \% \end{aligned}$ |  | $\begin{gathered} 1 \% \text { Increase } \\ 7.75 \% \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 53,499 | \$ | 27,480 | \$ | 5,901 |
| \$ | 52,195 | \$ | 27,172 | \$ | 6,428 |

## 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, 2017 and 2016 is presented in the following tables.

San Antonio Water System Retirement Plan
Net Position Restricted for Pension Benefits (amounts in thousands)

|  | December 31, 2017 |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Defined <br> Benefit | Defined <br> Contribution | Total | Defined <br> Benefit | Defined Contribution | Total |  |
| Assets |  |  |  |  |  |  |  |
| Employer contributions receivable | \$ | \$ - | \$ | \$ 1,067 | \$ | \$ | 1,067 |
| Investments | 208,132 | 3,260 | 211,392 | 174,212 | 1,556 |  | 175,768 |
| Total Assets | 208,132 | 3,260 | 211,392 | 175,279 | 1,556 |  | 176,835 |
| Liabilities | - | - | - | - | - |  | - |
| Net position restricted for |  |  |  |  |  |  |  |
| pension benefits | \$ 208,132 | \$ 3,260 | \$ 211,392 | \$ 175,279 | \$ 1,556 | \$ | 176,835 |

San Antonio Water System Retirement Plan
Changes in Net Position Restricted for Pension Benefits
(amounts in thousands)
For the years ended

|  | December 31, 2017 |  |  |  |  |  | December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Defined <br> Benefit |  | Defined <br> Contribution |  | Total |  | Defined Benefit |  | Defined <br> Contribution |  | Total |  |
| Additions |  |  |  |  |  |  |  |  |  |  |  |  |
| Employer Contributions | \$ | 7,982 | \$ | 850 | \$ | 8,832 | \$ | 7,367 | \$ | 551 | \$ | 7,918 |
| Employee Contributions |  | 2,484 |  | 663 |  | 3,147 |  | 2,533 |  | 421 |  | 2,954 |
| Investment Income (Loss) |  | 30,741 |  | 428 |  | 31,169 |  | 6,971 |  | 76 |  | 7,047 |
| Total additions |  | 41,207 |  | 1,941 |  | 43,148 |  | 16,871 |  | 1,048 |  | 17,919 |
| Deductions |  |  |  |  |  |  |  |  |  |  |  |  |
| Pension payments/distributions |  | 7,974 |  | 223 |  | 8,197 |  | 7,283 |  | 109 |  | 7,392 |
| Administrative Expenses |  | 380 |  | 14 |  | 394 |  | 195 |  | 15 |  | 210 |
|  |  | 8,354 |  | 237 |  | 8,591 |  | 7,478 |  | 124 |  | 7,602 |
| Increase in net position |  | 32,853 |  | 1,704 |  | 34,557 |  | 9,393 |  | 924 |  | 10,317 |
| Net position restricted for |  |  |  |  |  |  |  |  |  |  |  | 166,518 |
| Net position restricted for pension benefits - ending | \$ | 208,132 | \$ | 3,260 | \$ | 211,392 | \$ | 175,279 | \$ | 1,556 | \$ | 176,835 |

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 seven 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, |  |
| :--- | ---: | ---: |
|  | 2017 |  |
|  | 1,285 | 2016 |
| Active employees |  | 1,400 |
| Retirees and beneficiaries | 946 | 868 |
| currently receiving benefits | 522 | 515 |
| Inactive members |  | 2,753 |
| Total |  |  |

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 2017 and 2016 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, 2017 and 2016 was measured as of January 1, 2017 and 2016, 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, 2017 and 2016 valuations included the following actuarial assumptions:

|  | January 1, 2017 | January 1, 2016 |
| :--- | :---: | :---: |
| Annual inflation | $2.00 \%$ | $2.25 \%$ |
| Investment rate of return | $6.50 \%$ | $6.75 \%$ |

Real wage growth is based on a service-related table based on SAWS' experience from 2011 to 2013.

Mortality rates for the January 1, 2017 valuation were based on RP-2006 total dataset mortality table projected to future years with historical and assumed mortality improvement (MI) rates using the Principal Mortality Improvement (PMI) Scale. 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 PMI scale is based on the SOA MI model PREC_2014_v2016 and Principal selected assumption set published November 2016. Mortality rates for the January 1, 2016 valuation were as of 2006 from the SOA RP-2014 study. MI beyond 2007 was based on the RPEC_2014 model and assumes a convergence period of 10 years. Long-term MI is the sex-distinct and the age based assumption calibrated to the annual improvement averages, for the period 2010-2088 published by the SOA Trustees Report for 2014.

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) 2014. 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 2014 is 20-30 years. Primarily as a result of a change in the target allocation of assets, the long-term expected rate of return used in the January 1,2017 valuation was reduced to $6.50 \%$ from the long-term expected rate of return used in the January 1, 2016 valuation of $6.75 \%$.

The target allocation and best estimates of arithmetic real rates of return for each major asset class including inflation are summarized in the following table:

| Asset Class | January 1, 2017 |  | January 1, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Target Allocation | Long-term | Target Allocation | Long-term |
|  |  | Expected Real |  | Expected Real |
|  |  | Rate of Return |  | Rate of Return |
| US Equity - Large Cap | 65.0\% | 6.50\% | 73.0\% | 8.80\% |
| Core Bond | 6.6\% | 3.60\% | 27.0\% | 4.25\% |
| Cash | 0.1\% | 1.55\% |  |  |
| Aggregate Credit Bond | 7.3\% | 4.05\% |  |  |
| Long Credit Bond | 5.5\% | 4.75\% |  |  |
| Long Gov't Bond | 1.8\% | 2.65\% |  |  |
| Ultra Long Gov't Bond | 13.7\% | 1.85\% |  |  |
| Total | 100.0\% |  | 100.0\% |  |

The discount rate used to measure the Total Pension Liability at December 31, 2017 was $6.50 \%$ and $6.75 \%$ at December 31, 2016. 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.

The following table summarizes the changes in the SAWSRP Net Pension Liability for the year ended December 31, 2017 and 2016 based on the measurement date of January 1, 2017 and January 1, 2016, respectively.

|  |  |  |  |  | $\begin{gathered} 2016 \\ \text { Increase (Decrease) } \\ \hline \end{gathered}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pension Liability (a) | Fiduciary <br> Net Position <br> (b) |  | Pension <br> iability a) - (b) |  | Pension <br> Liability (a) | Fiduciary <br> Net Position <br> (b) |  | Net Pension Liability <br> (a) - (b) |  |
| Balances at January 1, Changes for the year: | \$ 200,206 | \$ 165,886 | \$ | 34,320 | \$ | 184,435 | \$ | 160,759 | \$ | 23,676 |
| Service Cost | 5,724 | - |  | 5,724 |  | 5,004 |  | - |  | 5,004 |
| Interest | 13,680 | - |  | 13,680 |  | 12,596 |  | - |  | 12,596 |
| Differences between expected and actual experience | 712 | - |  | 712 |  | 555 |  | - |  | 555 |
| Changes in assumptions | 5,532 | - |  | 5,532 |  | (405) |  | - |  | (405) |
| Changes in terms | - |  |  | - |  | 4,339 |  |  |  | 4,339 |
| Contributions - employer | - | 7,367 |  | $(7,367)$ |  | - |  | 7,890 |  | $(7,890)$ |
| Contributions - employee |  | 2,533 |  | $(2,533)$ |  | - |  | 2,357 |  | $(2,357)$ |
| Net investment income | - | 6,971 |  | $(6,971)$ |  | - |  | 1,215 |  | $(1,215)$ |
| Benefit payments | $(7,283)$ | $(7,283)$ |  | - |  | $(6,318)$ |  | $(6,318)$ |  | - |
| Administrative expense | - | (195) |  | 195 |  | - |  | (17) |  | 17 |
| Other charges | - | - |  | - |  | - |  | - |  | - |
| Net Changes | 18,365 | 9,393 |  | 8,972 |  | 15,771 |  | 5,127 |  | 10,644 |
| Balances at December 31,* | \$ 218,571 | \$ 175,279 | \$ | 43,292 | \$ | 200,206 | \$ | 165,886 | \$ | 34,320 |

*Based on measurement date of January 1, 2017 and January 1, 2016, respectively

The following table presents the net pension liability associated with the defined benefit component of the SAWSRP calculated at December 31, 2017 using the discount rate of $6.50 \%$, as well as what the net pension liability 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.

December 31, 2017


The following table presents the net pension liability associated with the defined benefit component of the SAWSRP calculated at December 31, 2016 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 of one percentage point lower (5.75\%) or one percentage point higher (7.75\%) than the current rate.

December 31, 2016


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, 2017, SAWS made contributions to participants' individual retirement accounts totaling $\$ 850,000$, net of forfeitures of $\$ 35,000$ and employees contributed $\$ 663,000$. During the year ended December 31, 2016, SAWS made contributions to participants' individual retirement accounts totaling \$550,000 and employees contributed $\$ 421,000$, which included roll-over contributions of $\$ 8,000$.

## 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 to Standard Insurance Company the authority to manage plan assets and administer the payment of benefits under the plan.

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, 2017 and 2016 is presented in the following tables.

District Special Project Retirement Income Plan
Net Position Restricted for Pension Benefits
(amounts in thousands)
December 31, 2017 December 31, 2016
Assets
Investments

Total Assets
Liabilities
Net position restricted for pension benefits

| \$ | 5,706 | \$ | 5,410 |
| :---: | :---: | :---: | :---: |
|  | 5,706 |  | 5,410 |

than 20 years of service. Prior to March 1, 1996, average monthly earnings were based on the monthly earnings during the 5 consecutive and complete calendar years that produced the highest average. After March 1, 1996 average monthly earnings are determined by the 10 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, |  |
| :--- | ---: | ---: |
|  | 2017 |  |
|  | 108 | 2016 |
| Active employees |  | 115 |
| Retirees and beneficiaries | 12 | 12 |
| currently receiving benefits | 29 | 25 |
| Inactive members | 149 | 152 |
| Total |  |  |

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. The contribution requirements of plan are established and may be amended by the Board. The unit credit method was used to calculate the actuarial determined contribution for 2017 and 2016. 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, 2017 and 2016 was measured as of January 1, 2017 and 2016, 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, 2017 and 2016 valuations included the following actuarial assumptions:

|  | January 1, 2017 | January 1, 2016 |
| :--- | :---: | :---: |
| Annual inflation | $2.75 \%$ | $2.75 \%$ |
| Investment rate of return | $6.50 \%$ | $7.00 \%$ |

For 2017, mortality rates are based on the SOA RP-2014 table projected on a fully generational basis using mortality improvement scale MP02016. For 2016, mortality rates are based on the 1994 GAR Table projected to 2002. 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 longterm expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Primarily as a result of a change in the target allocation of assets, the long-term expected rate of return used in the January 1, 2017 valuation was reduced to $6.50 \%$ from the long-term expected rate of return used in the January 1, 2016 valuation of $7.0 \%$.

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

| Asset Class | January 1, 2017 |  | January 1, 2016 |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Long-term |  | Long-term |
|  |  | Expected Real |  | Expected Real |
|  | Target Allocation | Rate of Return | Target Allocation | Rate of Return |
| Domestic Equity | 56.0\% | 6.00\% | 60.0\% | 6.25\% |
| International Equity | 5.0\% | 6.00\% | 5.0\% | 6.25\% |
| Fixed Income | 39.0\% | 1.00\% | 35.0\% | 1.50\% |

The discount rate used to measure the total pension liability at December 31, 2017 was $6.5 \%$ and $7.0 \%$ at December 31, 2016. 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, 2017 and 2016 based on the measurement date of January 1, 2017 and 2016, respectively.

|  | $\qquad$ |  |  |  |  |  | $\begin{gathered} 2016 \\ \text { Increase (Decrease) } \\ \hline \end{gathered}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Pension Liability <br> (a) |  | Fiduciary <br> Net Position <br> (b) |  | Net Pension Liability <br> (a) - (b) |  | Pension Liability <br> (a) |  | Fiduciary <br> Net Position <br> (b) |  | Net Pension Liability <br> (a) - (b) |  |
| Balances at January 1, Changes for the year: | \$ | 6,686 | \$ | 5,156 | \$ | 1,530 | \$ | 6,359 | \$ | 5,097 | \$ | 1,262 |
| Service Cost |  | 71 |  | - |  | 71 |  | 124 |  | - |  | 124 |
| Interest |  | 418 |  | - |  | 418 |  | 446 |  | - |  | 446 |
| Differences between expected and actual experience |  | (381) |  |  |  | (381) |  | 18 |  | - |  | 18 |
| Changes in assumptions |  | 224 |  |  |  | 224 |  | - |  | - |  | - |
| Contributions - employer |  |  |  | 280 |  | (280) |  | - |  | 308 |  | (308) |
| Net investment income |  | - |  | 306 |  | (306) |  | - |  | 18 |  | (18) |
| Benefit payments |  | (324) |  | (324) |  | - |  | (261) |  | (261) |  | - |
| Administrative expense |  | - |  | (8) |  | 8 |  | - |  | (6) |  | 6 |
| Net Changes |  | 8 |  | 254 |  | (246) |  | 327 |  | 59 |  | 268 |
| Balances at December 31,* | \$ | 6,694 | \$ | 5,410 | \$ | 1,284 | \$ | 6,686 | \$ | 5,156 | \$ | 1,530 |

*Based on measurement date of January 1, 2017 and January 1, 2016 respectively

The following table presents the DSPRP net pension liability calculated at December 31, 2017 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. The discount rate was changed in 2017 to $6.5 \%$ from $7 \%$ in 2016.

December 31, 2017
DSPRP Net Pension Liability ( $\$$ in thousands)

| $1 \%$ Decrease <br> $5.50 \%$ |  | Current Discount Rate <br> $6.50 \%$ |  | $1 \%$ Increase <br> $7.50 \%$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1,568 | $\$$ | 1,284 | $\$$ | 1,134 |

The following table shows the DSPRP net pension liability calculated at December 31, 2016 at the discount rate of $7 \%$ as well as what it would be if it were $1 \%$ lower ( $6 \%$ ) or $1 \%$ higher ( $8 \%$ ).

DSPRP Net Pension Liability (\$ in thousands)


## Other Pension Disclosures

For the years ended December 31, 2017 and December 31, 2016, SAWS recognized pension expense under the TMRS, SAWSRP and DSPRP plans as follows:

Pension Expense
(\$ in thousands)
Year-ended December 31,

TMRS
SAWSRP - defined benefit
SAWSRP - defined contribution
DSPRP

| 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: |
| \$ | 6,005 | \$ | 5,321 |
|  | 9,201 |  | 10,012 |
|  | 850 |  | 551 |
|  | 203 |  | 289 |
| \$ | 16,259 | \$ | 16,173 |

Amounts payable to the pension plans by SAWS for contributions totaled \$200,000 at December 2017 and \$1,797,000 at December 31, 2016.

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, 2017 and 2016.

| (\$ in thousands) <br> Plan | December 31, 2017 |  |  |  |  |  | December 31, 2016 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deferred Outflows of Resources |  | Net Pension Liability |  | Deferred <br> Inflows of <br> Resources |  | Deferred Outflows of Resources |  | Net Pension Liability |  | Deferred <br> Inflows of <br> Resources |  |
| TMRS | \$ | 11,568 | \$ | 27,480 | \$ | 1,495 | \$ | 14,011 | \$ | 27,172 | \$ | 2,095 |
| SAWSRP |  | 21,008 |  | 43,292 |  | 494 |  | 13,456 |  | 34,320 |  | 698 |
| DSPRP |  | 852 |  | 1,284 |  | 339 |  | 648 |  | 1,530 |  | - |
| Total - All Plans | \$ | 33,428 | \$ | 72,056 | \$ | 2,328 | \$ | 28,115 | \$ | 63,022 | \$ | 2,793 |

At December 31, 2017, Deferred Outflows of Resources and Deferred Inflows of Resources associated with SAWS pension plans related to the following sources:

| (s in thousands) | SAWSRP |  |  |  | TMRS |  |  |  | DSPRP |  |  |  | All Plans |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deferred <br> Outflows of Resources |  | Deferred Inflows of Resources |  | Deferred Outflows of Resources |  | Deferred <br> Inflows of <br> Resources |  | Deferred Outflows of Resources |  | Deferred <br> Inflows of <br> Resources |  | Deferred Outflows of Resources |  | Deferred <br> Inflows of <br> Resources |  |
| Contributions made after the measurement date | \$ | 7,982 | \$ | - | \$ | 3,852 | \$ | - | \$ | 315 | \$ |  | \$ | 12,149 | \$ |  |
| Differences between expected and actual experience |  | 890 |  | 248 |  | 23 |  | 1,495 |  | 121 |  | 339 |  | 1,034 |  | 2,082 |
| Effects of changes in assumption |  | 5,407 |  | 246 |  | 257 |  | - |  | 199 |  | - |  | 5,863 |  | 246 |
| Net Difference between projected and actual earnings on pension plan investments |  | 6,729 |  | - |  | 7,436 |  | - |  | 217 |  |  |  | 14,382 |  | - |
|  | \$ | 21,008 | \$ | 494 | \$ | 11,568 | \$ | 1,495 | \$ | 852 | \$ | 339 | \$ | 33,428 | \$ | 2,328 |

At December 31, 2016, Deferred Outflows of Resources and Deferred Inflows of Resources associated with SAWS pension plans related to the following sources:

|  | SAWSRP |  | TMRS |  | DSPRP |  | All Plans |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (\$ in thousands) | Deferred <br> Outflows of $\qquad$ | Deferred <br> Inflows of <br> Resources | Deferred <br> Outflows of Resources | Deferred <br> Inflows of <br> Resources | Deferred <br> Outflows of <br> Resources | Deferred <br> Inflows of <br> Resources | Deferred <br> Outflows of <br> Resources | Deferred <br> Inflows of <br> Resources |
| Contributions made after the measurement date | \$ 7,367 | \$ - | \$ 3,609 | \$ - | \$ 280 | \$ - | \$ 11,256 | \$ - |
| Differences between expected and actual experience | 446 | 373 | - | 2,095 | 138 |  | 584 | 2,468 |
| Effects of changes in assumption | 1,660 | 325 | 345 | - |  | - | 2,005 | 325 |
| Net Difference between projected and actual earnings on pension plan investments | 3,983 | - | 10,057 |  | 230 |  | 14,270 | - |
|  | \$ 13,456 | \$ 698 | \$ 14,011 | \$ 2,095 | 648 | \$ | \$ 28,115 | \$ 2,793 |

Contributions made after the measurement date of $\$ 12,149,000$ will be recognized as a reduction of the Net Pension Liability for the year ending December 31, 2018. 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 | (\$ in thousands) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, | SAWSRP |  | TMRS |  | DSPRP |  | Combined |  |
| 2018 | \$ | $(3,400)$ | \$ | $(2,105)$ | \$ | (64) | \$ | $(5,569)$ |
| 2019 |  | $(3,400)$ |  | $(2,105)$ |  | (64) |  | $(5,569)$ |
| 2020 |  | $(4,181)$ |  | $(2,007)$ |  | (79) |  | $(6,267)$ |
| 2021 |  | $(1,551)$ |  | (4) |  | (11) |  | $(1,566)$ |
| 2022 |  |  |  |  |  | 1 |  | 1 |
| Thereafter |  | - |  | - |  | 19 |  | 19 |

The following table summarizes the components of the net pension liability at December 31, 2017 and 2016 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, 2017 (a) |  |  | December 31, 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (\$ in thousands) | SAWSRP | DSPRP |  | SAWSRP |  | DSPRP |  |
| Total pension liability | \$ 229,416 | \$ | 6,566 | \$ | 218,571 | \$ | 6,694 |
| Plan fiduciary net position | 208,132 |  | 5,706 |  | 175,279 |  | 5,410 |
| Net pension liability | $\underline{\$ \quad 21,284}$ | \$ | 860 | \$ | 43,292 | \$ | 1,284 |
| Plan fiduciary net position as a percentage of the total pension liability | 90.7\% |  | 86.9\% |  | 80.2\% |  | 80.8\% |

(a) Actuarial valuation performed at January 1, 2017 was rolled forward to December 31, 2017

## 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, 2017 and 2016 is presented in the following tables.

San Antonio Water System Retiree Health Plan<br>Net Position Restricted for Post Employment Benefits

(amounts in thousands)

| December 31, |  |  |  |
| :---: | :---: | :---: | :---: |
| 2017 |  | 2016 |  |
| \$ | 1,733 | \$ | 891 |
|  | 56,778 |  | 43,137 |
|  | 58,511 |  | 44,028 |
|  | - |  | - |
| \$ | 58,511 | \$ | 44,028 |



In conjunction with the adoption of GASB Statement No. 74 in 2017, SAWS restated the plan's financial statements for December 31, 2016 to include current benefit payments taking place outside the trust. These payments were funded with SAWS and participant contributions. This restatement had no impact on the Net Position restricted for post-employment benefits at December 31, 2016.

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, 2017 and 2016 consisted of the following:

|  | January 1,2017 |  | January 1, 2016 |
| :--- | ---: | ---: | ---: |
|  |  |  | 1,591 |
| Active employees | 1,501 |  | 793 |
| Retired employees | 833 |  | 2,384 |

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 $\$ 1,103,000$ in 2017 and $\$ 818,000$ in 2016.

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 payment 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 SAWS OPEB Plan.

## Actuarial Methods and Assumptions

| Actuarial Valuation Date | January 1, 2017 | January 1, 2016 |
| :--- | :---: | :---: |
| Actuarial Value of Assets | Market Value | Market Value |
| Actuarial Cost Method | Entry Age Normal | Projected Unit Credit |
| Amortization Method | Level Dollar | Level Dollar |
| Remaining Amortization Period | 17 Years - Closed | 18 Years - Closed |
| Actuarial Assumptions: | $6.5 \%$ |  |
| Investment Rate of Return | $2.5 \%$ | $6.5 \%$ |
| Inflation Rate |  | $2.5 \%$ |
| Healthcare Cost Trend: | $5.50 \%$ |  |
| $\quad$ Initial | $4.14 \%$ | $7.00 \%$ |
| $\quad$ Ultimate |  | $3.84 \%$ |

Mortality rates were based on PR-2014 Healthy Employee Mortality Tables for males and females for pre-retirement employees and PR-2014 Healthy Annuitant Mortality Table. Historical and assumed mortality improvement (MI) was based on the Principal Mortality Improvement (PMI) Scale used by SAWSRP.

SAWS' annual OPEB cost is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with GASB Statement 45. The ARC represents a level of funding that if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over a period of time. The following table shows the components of SAWS' annual OPEB cost, the amount actually contributed to the plan and changes in the net OPEB obligation for the years ended December 31, 2017 and 2016:

| (amounts in thousands) | Year Ended December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Annual Required Contribution (ARC) | \$ | 12,412 | \$ | 11,416 |
| Interest on net OPEB obligation |  | 4,780 |  | 5,223 |
| Adjustment to ARC |  | $(7,273)$ |  | $(7,704)$ |
| Annual OPEB costs |  | 9,919 |  | 8,935 |
| Employer contributions made (a) |  | $(14,525)$ |  | $(15,746)$ |
| Increase/(Decrease) in net OPEB obligation |  | $(4,606)$ |  | $(6,811)$ |
| Net OPEB obligation at beginning of year |  | 73,539 |  | 80,350 |
| Net OPEB obligation at end of year | \$ | 68,933 | \$ | $\underline{ } 73,539$ |

(a) Amounts reported as employer contributions for life insurance benefits represent actual death benefit payments made during the period. Employer contributions reported in the SAWS OPEB Plan's summary financial statements on page 70 reflect the premiums paid for life insurance benefits.

SAWS' annual OPEB cost and the percentage cost contributed to the plan for December 31, 2017 was as follows:

| Year Ended | Annual OPEB |  | Percentage of | Net OPEB |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | unts in | Annual OPEB |  | amounts |
| December 31, |  |  | Cost Contributed |  |  |
| 2017 | \$ | 9,919 | 146.4\% | \$ | 68,933 |

The funded status of SAWS OPEB Plan as of the most recent actuarial valuation performed as of January 1, 2017 is as follows:

|  |  | Actuarial |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarial <br> Valuation Date | Actuarial Value of Assets (in thousands) <br> (a) | Accrued Liability (AAL) (in thousands) (b) | Unfunded AAL (UAAL) (in thousands) (b-a) | Funded <br> Ratio <br> (a/b) | Covered <br> Payroll (in thousands) <br> (c) | UAAL as a <br> Percent of Covered Payroll $((\mathrm{b}-\mathrm{a}) / \mathrm{c})$ |
| January 1, 2017 | \$ 44,028 | 144,960 | \$ 100,932 | 30\% | \$ 79,417 | 127\% |

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits.

The following disclosures for the SAWS OPEB Plan are provided in accordance with GASB Statement No. 74 since the plan is a single-employer OPEB plan and included in SAWS financial fiduciary fund statements.

The components of the net OPEB liability for the SAWS OPEB Plan at December 31, 2017 and 2016 were as follows:

| (\$ in thousands) | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 2017 |  | 2016 |
| Total OPEB liability | \$ | 150,369 | \$ | 144,960 |
| Plan fiduciary net position |  | 58,511 |  | 44,028 |
| Net OPEB liability | \$ | 91,858 | \$ | 100,932 |
| Plan fiduciary net position as a percentage of the total OPEB liability |  | 38.9\% |  | 30.4\% |

The following table presents the change in the SAWS OPEB Plan net OPEB liability calculated at December 31, 2017 assuming healthcare cost trends decrease or increase by one percentage point from the assumptions used in Total OPEB liability.


The target allocation and best estimates of arithmetic real rates of return for each major asset class including inflation are summarized in the following table:

| Asset Class | January 1, 2017 |  |
| :---: | :---: | :---: |
|  | Target Allocation | Long-term Expected Real Rate of Return |
| Domestic Equity - Large Cap | 36.0\% | 7.72\% |
| Domestic Equity - Small Cap | 9.0\% | 8.55\% |
| Foreign Equity - Large Core | 13.5\% | 7.47\% |
| Foreign Equity - Emerging Markets | 1.5\% | 8.96\% |
| Fixed Income - Core Bond | 38.0\% | 3.12\% |
| Cash | 2.0\% | 2.46\% |
| Total | 100.0\% |  |

The discount rate used to measure the Total OPEB Liability 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.

For the year ended December 31, 2017, the annual money-weighted rate of return on SAWS OPEB Plan investments, net of investment expense was $14.7 \%$. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amount actually invested.

The following table presents the SAWS OPEB Plan net OPEB liability calculated at December 31, 2017 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.

|  | (\$ in thousands) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { 1\% Decrease } \\ 5.5 \% \end{gathered}$ |  | Current Discount Rate$6.5 \%$ |  | $\begin{gathered} 1 \% \text { Increase } \\ 7.5 \% \end{gathered}$ |  |
| Net OPEB liability | \$ | 110,693 | \$ | 91,858 | \$ | 76,378 |

## REQUIRED SUPPLEMENTAL INFORMATION

## REQUIRED SUPPLEMENTAL INFORMATION

## Texas Municipal Retirement System - San Antonio Water System Schedule of Changes in Net Pension Liability and Related Ratios (Unaudited)

(\$ in thousands)

| Total pension liability |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Cost | \$ | 4,979 | \$ | 4,810 | \$ | 4,379 |
| Interest |  | 12,623 |  | 12,480 |  | 11,960 |
| Changes of benefit terms |  |  |  | - |  | - |
| Differences between expected and actual experience |  | 29 |  | $(1,311)$ |  | $(1,717)$ |
| Changes of assumptions |  |  |  | 433 |  | - |
| Benefit payments |  | $(8,186)$ |  | $(7,337)$ |  | $(7,461)$ |
| Net change in pension liability |  | 9,445 |  | 9,075 |  | 7,161 |
| Total pension liability at beginning of year |  | 188,624 |  | 179,549 |  | 172,388 |
| Total pension liability at end of year (a) | \$ | 198,069 | \$ | 188,624 | \$ | 179,549 |
| Plan fiduciary net position |  |  |  |  |  |  |
| Contributions - Employer | \$ | 3,609 | \$ | 3,953 | \$ | 3,721 |
| Contributions - Employee |  | 2,935 |  | 2,892 |  | 2,722 |
| Net investment income |  | 10,909 |  | 239 |  | 8,818 |
| Benefit payments |  | $(8,186)$ |  | $(7,337)$ |  | $(7,461)$ |
| Administrative expenses |  | (123) |  | (146) |  | (92) |
| Other |  | (7) |  | (7) |  | (8) |
| Net change in plan fiduciary net position |  | 9,137 |  | (406) |  | 7,700 |
| Plan fiduciary net position at beginning of year |  | 161,452 |  | 161,858 |  | 154,158 |
| Plan fiduciary net position at end of year (b) | \$ | 170,589 | \$ | 161,452 | \$ | 161,858 |
| Net pension liability (a) - (b) | \$ | 27,480 | \$ | 27,172 | \$ | 17,691 |
| Plan fiduciary net position as a percentage of the |  |  |  |  |  |  |
| Covered payroll | \$ | 97,818 | \$ | 96,389 | \$ | 90,721 |
| Net pension liability as a percentage of total |  |  |  |  |  |  |
| Covered payroll |  | 28.1\% |  | 28.2\% |  | 19.5\% |

## Notes to Schedule:

Changes of assumptions: In 2015, amounts reported as changes of assumptions resulted primarily from a reduction in the assumed long-term rate of return 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 3 years of data is available. A full 10 years of data will be presented by 2023

## REQUIRED SUPPLEMENTAL INFORMATION

Texas Municipal Retirement System - San Antonio Water System Schedule of Contributions (Unaudited)<br>(\$ in thousands)

|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 3,852 | \$ | 3,609 | \$ | 3,672 | \$ | 3,721 |
| Contributions in relation to the actuarially determined contribution |  | 3,852 |  | 3,609 |  | 3,953 |  | 3,721 |
| Contribution deficiency/(excess) | \$ | - | \$ | - | \$ | (281) | \$ | - |
| Covered payroll | \$ | 104,960 | \$ | 97,818 | \$ | 96,389 | \$ | 90,721 |
| Contributions as a percentage of Covered payroll |  | 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 | 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 $10.5 \%$ in 2015, 2016 and 2017 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 puruant 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 4 years of data is available. A full 10 years of data will be presented by 2023.

## REQUIRED SUPPLEMENTAL INFORMATION

> San Antonio Water System Retirement Plan - Defined Benefit Component Schedule of Changes in Net Pension Liability and Related Ratios (Unaudited) (\$ in thousands)

| Total pension liability |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Cost | \$ | 5,859 | \$ | 5,724 | \$ | 5,004 | \$ | 5,204 |
| Interest |  | 14,354 |  | 13,680 |  | 12,596 |  | 11,709 |
| Changes of benefit terms |  |  |  | - |  | 4,339 |  | - |
| Differences between expected and actual experience |  | $(1,394)$ |  | 712 |  | 555 |  | (622) |
| Changes of assumptions |  |  |  | 5,532 |  | (405) |  | 2,771 |
| Benefit payments |  | $(7,974)$ |  | $(7,283)$ |  | $(6,318)$ |  | $(5,796)$ |
| Net change in pension liability |  | 10,845 |  | 18,365 |  | 15,771 |  | 13,266 |
| Total pension liability at beginning of year |  | 218,571 |  | 200,206 |  | 184,435 |  | 171,169 |
| Total pension liability at end of year (a) | \$ | 229,416 | \$ | 218,571 | \$ | 200,206 | \$ | 184,435 |
| Plan fiduciary net position |  |  |  |  |  |  |  |  |
| Contributions - Employer | \$ | 7,982 | \$ | 7,367 | \$ | 7,890 | \$ | 10,339 |
| Contributions - Employee |  | 2,484 |  | 2,533 |  | 2,357 |  | - |
| Net investment income |  | 30,741 |  | 6,971 |  | 1,215 |  | 15,695 |
| Benefit payments |  | $(7,974)$ |  | $(7,283)$ |  | $(6,318)$ |  | $(5,796)$ |
| Administrative expenses |  | (380) |  | (195) |  | (17) |  | - |
| Net change in plan fiduciary net position |  | 32,853 |  | 9,393 |  | 5,127 |  | 20,238 |
| Plan fiduciary net position at beginning of year |  | 175,279 |  | 165,886 |  | 160,759 |  | 140,521 |
| Plan fiduciary net position at end of year (b) | \$ | 208,132 | \$ | 175,279 | \$ | 165,886 | \$ | 160,759 |
| Net pension liability (a) - (b) | \$ | 21,284 | \$ | 43,292 | \$ | 34,320 | \$ | 23,676 |
| Plan fiduciary net position as a percentage of the |  |  |  |  |  |  |  |  |
| Covered payroll | \$ | 79,417 | \$ | 83,493 | \$ | 85,299 | \$ | 83,812 |
| Net pension liability as a percentage of total covered payroll |  | 26.8\% |  | 51.9\% |  | 40.2\% |  | 28.2\% |

## Notes to Schedule:

Total pension liability at December 31, 2017 is based on a rollforward of the January 1, 2017 actuarial valuation
Benefit Changes: Effective June 1, 2014, the defined benefit plan was frozen to new entrants. In 2015, the normal form of distribution changed and a mandatory employee contribution of $3 \%$ of payroll was instituted.
Changes of assumptions: In 2016, the long term rate of return was reduced to $6.5 \%$. In 2014, amounts reported as changes of assumptions resulted from a reduction in the assumed long-term rate of return from $7 \%$ to $6.75 \%$. In 2015 , mortality rates were updated to reflect 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 4 years of data is available. A full 10 years of data will be presented by 2023.

## REQUIRED SUPPLEMENTAL INFORMATION

## San Antonio Water System Retirement Plan - Defined Benefit Component <br> Schedule of Contributions (Unaudited) <br> (\$ in thousands)

|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 7,982 | \$ | 7,367 | \$ | 7,890 | \$ | 10,339 |
| Contributions in relation to the actuarially determined contribution |  | 7,982 |  | 7,367 |  | 7,890 |  | 10,339 |
| Contribution deficiency/(excess) | \$ | - | \$ | - | \$ | - | \$ | - |
| Covered payroll | \$ | 79,417 | \$ | 83,493 | \$ | 85,299 | \$ | 83,812 |
| Contributions as a percentage of covered payroll |  | 10.1\% |  | 8.8\% |  | 9.2\% |  | 12.3\% |

## Notes to Schedule:

Valuation date: Actuarially determined contributions are determined as of Janaury 1 of the year in which the contributions are made.
Methods and assumptions used to determine contributions:

Actuarial cost method
Remaining amortization period

Asset valuation method
Inflation
Salary increases
Retirement age

Investment rate of return

Mortality Table

Entry Age Normal
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 10 years.
4 year smoothed market
In 2017 , the rate was changed to $2 \%$, previously it was $2.25 \%$
Scale based on 2011-2013 SAWS experience
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.

In 2017, the rate was changed friom $6.75 \%$ to $6.5 \%$, net of pension expense, including inflation. In 2014, the rate was change from $7.0 \%$ to 6.75\%

In 2017, the mortality table was changed to use adjusted RP-2014 mortality with scale MP-2016 based on data published by the SOA in 2016. 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 in the Schedule of Contributions. As SAWS adopted GASB 68 in 2014 , only 4 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 Investment Returns (Unaudited)

|  | 2017 | 2016 | 2015 | 2014 |
| :---: | :---: | :---: | :---: | :---: |
| Annual money-weighted rate of return, net of |  |  |  |  |
| investment expense | 17.37\% | 4.21\% | 0.76\% | 11.34\% |

## REQUIRED SUPPLEMENTAL INFORMATION

District Special Project Retirement Income Plan<br>Schedule of Changes in Net Pension Liability and Related Ratios (Unaudited)

|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Pension Liability |  |  |  |  |  |  |  |  |
| Service cost | \$ | 108 | \$ | 71 | \$ | 124 | \$ | 123 |
| Interest |  | 424 |  | 418 |  | 446 |  | 424 |
| Benefit payments |  | (776) |  | (324) |  | (261) |  | (230) |
| Changes in assumptions |  | 15 |  | 224 |  |  |  |  |
| Difference between expected and actual experience |  | 101 |  | (381) |  | 18 |  | 153 |
| Net change in Total Pension Liability |  | (128) |  | 8 |  | 327 |  | 470 |
| Total Pension Liability - beginning |  | 6,694 |  | 6,686 |  | 6,359 |  | 5,889 |
| Total Pension Liability - ending (a) | \$ | 6,566 | \$ | 6,694 | \$ | 6,686 | \$ | 6,359 |
| Fiduciary Net Position |  |  |  |  |  |  |  |  |
| Employer contributions | \$ | 315 | \$ | 280 | \$ | 308 | \$ | 414 |
| Net investment income |  | 764 |  | 306 |  | 18 |  | 394 |
| Benefit payments |  | (776) |  | (324) |  | (261) |  | (230) |
| Administrative expenses |  | (7) |  | (8) |  | (6) |  | (11) |
| Net change in Fiduciary Net Position |  | 296 |  | 254 |  | 59 |  | 567 |
| Fiduciary Net Position - beginning |  | 5,410 |  | 5,156 |  | 5,097 |  | 4,530 |
| Fiduciary Net Position - ending (b) | \$ | 5,706 | \$ | 5,410 | \$ | 5,156 | \$ | 5,097 |
| Net Pension Liability (a) - (b) | \$ | 860 | \$ | 1,284 | \$ | 1,530 | \$ | 1,262 |
| Fiduciary Net Position as a percentage of the Total Pension Liability |  | 86.9\% |  | 80.8\% |  | 77.1\% |  | 80.2\% |
| Covered payroll ( frozen plan) |  | $\mathrm{n} / \mathrm{a}$ |  | $\mathrm{n} / \mathrm{a}$ |  | $\mathrm{n} / \mathrm{a}$ |  | $\mathrm{n} / \mathrm{a}$ |
| Net Pension Liability as a percentage of covered payroll |  | $\mathrm{n} / \mathrm{a}$ |  | $\mathrm{n} / \mathrm{a}$ |  | $\mathrm{n} / \mathrm{a}$ |  | $\mathrm{n} / \mathrm{a}$ |

## 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, 2017 is based on a rollforward of the January 1, 2017 actuarial valuaiton.
Changes in assumptions: The interest rate of return was modified from 7\% to 6.5\% in 2017.
Other: GASB 68 requires 10 years of data to be provided in the Schedule of Contributions. As SAWS adopted GASB 68 in 2014, only 4 years of data is available. A full 10 years of data will be presented by 2023.

## REQUIRED SUPPLEMENTAL INFORMATION

District Special Project Retirement Income Plan Schedule of Contributions (Unaudited)
(\$ in thousands)
Actuarially determined contribut
Contributions in relation to the
determined contribution
Contribution deficiency/(excess)

| 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 315 | \$ | 279 | \$ | 274 | \$ | 307 |
|  | 315 |  | 280 |  | 308 |  | 414 |
| \$ | - | \$ | (1) | \$ | (34) | \$ | (107) |

Covered payroll (frozen plan)

Contributions as a percentage of covered payroll
n/a
$\mathrm{n} / \mathrm{a}$
$\mathrm{n} / \mathrm{a}$
$\mathrm{n} / \mathrm{a}$
$\mathrm{n} / \mathrm{a} \quad \mathrm{n} / \mathrm{a} \quad \mathrm{n} / \mathrm{a} \quad \mathrm{n} / \mathrm{a}$

## 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 | 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 2017, the table was changed to the RP-2014 table using a 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 4 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)

Annual money-weighted rate of return, net of investment expense

$$
14.76 \%
$$

5.98\%
0.29\%
8.55\%

## REQUIRED SUPPLEMENTAL INFORMATION

## San Antonio Water System Other Post Employment Benefit Plan <br> Schedule of Changes in Net OPEB Liability and Related Ratios (Unaudited) <br> (s in thousands)

2017


## REQUIRED SUPPLEMENTAL INFORMATION

San Antonio Water System Other Post Employment Benefit Plan<br>Schedule of Contributions (Unaudited) (\$ in thousands)

|  | 2017 |  |
| :---: | :---: | :---: |
| Actuarially determined contribution | \$ | 12,412 |
| Contributions in relation to the actuarially |  |  |
| determined contribution |  | 13,709 |
| Contribution deficiency/(excess) | \$ | $\underline{(1,297)}$ |
| Covered payroll | \$ | 79,417 |
| Contributions as a percentage of covered payroll |  | 17.3\% |

## Notes to Schedule:

Valuation date: Actuarially determined contributions are determined as of Janaury 1 of the year in which the contributions are made.
Methods and assumptions used to determine contributions:

Actuarial cost method
Salary increases
Mortality Assumptions:

Pre-retirement
Postemployment
Inflation
Healthcare cost trend rates:
Current Year
Ultimate trend rate
Ultimate year
Investment rate of return
Remaining amortization period

Entry Age Normal
Scale based on 2011-2013 SAWS experience
Adjusted RP-2014 mortality with scale MP-2016 based on data published by the SOA in 2016.

PR-2014 Healthy Employee Mortality Tables
PR-2014 Healthy Employee Annuitant Tables
2.50\%
5.50\%
4.14\%

2074
6.50\%

17 years

GASB 74 requires 10 years of data to be provided in the Schedule of Contributions. As SAWS adopted GASB 74 in 2017, only one year 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)

Annual money-weighted rate of return, net of investment expense

## REQUIRED SUPPLEMENTAL INFORMATION

Other Post Employment Benefit Plan
Schedule of Funding Progress (Unaudited)


Other Post Employment Benefit Plan Schedule of Employer Contributions (Unaudited)

| Year Ended <br> December 31, | Annual |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Required |  |  | Net OPEB |  |
|  | Contribution |  | Percentage | Obligation |  |
|  |  | sands) | Contributed |  | ands) |
| 2017 | \$ | 12,412 | 117\% | \$ | 68,933 |
| 2016 | \$ | 11,416 | 138\% | \$ | 73,539 |
| 2015 | \$ | 12,978 | 106\% | \$ | 80,350 |

## OTHER SUPPLEMENTAL INFORMATION

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## SUPPLEMENTAL SCHEDULES

## San Antonio Water System <br> SCHEDULE OF REVENUES AND OTHER FINANCIAL SOURCES AND THEIR DISPOSITION

(amounts in thousands)
For the years ended December 31,

|  | 2017 |  | 2016 |  | Increase <br> (Decrease) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SOURCES OF FUNDS |  |  |  |  |  |  |
| OPERATING REVENUES |  |  |  |  |  |  |
| Water delivery system | \$ | 202,264 | \$ | 190,913 | \$ | 11,351 |
| Water supply system |  | 202,143 |  | 185,037 |  | 17,106 |
| Wastewater System |  | 250,977 |  | 234,966 |  | 16,011 |
| Chilled water and steam system |  | 11,368 |  | 11,541 |  | (173) |
| Total operating revenues |  | 666,752 |  | 622,457 |  | 44,295 |
| NONOPERATING REVENUES |  |  |  |  |  |  |
| Interest earned and miscellaneous |  | 10,407 |  | 8,146 |  | 2,261 |
| Other financing sources (draw on equity) |  | 1,541 |  | 1,400 |  | 141 |
| Total nonoperating revenues |  | 11,948 |  | 9,546 |  | 2,402 |
| CAPITAL CONTRIBUTIONS |  |  |  |  |  |  |
| Capital Recovery Fees |  | 72,846 |  | 67,991 |  | 4,855 |
| Contributions in Aid of Construction |  | 7,925 |  | 3,866 |  | 4,059 |
| Total capital contributions |  | 80,771 |  | 71,857 |  | 8,914 |
| TOTAL SOURCES OF FUNDS | \$ | 759,471 | \$ | 703,860 | \$ | 55,611 |
| USES OF FUNDS |  |  |  |  |  |  |
| OPERATION AND MAINTENANCE |  |  |  |  |  |  |
| Salaries and fringe benefits | \$ | 149,874 | \$ | 142,795 | \$ | 7,079 |
| Contractual services |  | 168,350 |  | 170,845 |  | $(2,495)$ |
| Materials and supplies |  | 23,159 |  | 21,959 |  | 1,200 |
| Other charges |  | 9,156 |  | 12,269 |  | $(3,113)$ |
| Less: Costs capitalized to Construction in Progress |  | $(32,219)$ |  | $(32,629)$ |  | 410 |
| Total operation and maintenance |  | 318,320 |  | 315,239 |  | 3,081 |
| OPERATING RESERVE REQUIREMENT |  | 1,864 |  | 519 |  | 1,345 |
| DEBT REQUIREMENTS |  |  |  |  |  |  |
| Interest costs |  | 109,359 |  | 106,524 |  | 2,835 |
| Retirement of bonds |  | 87,953 |  | 84,784 |  | 3,169 |
| Other debt expense |  | 2,697 |  | 2,121 |  | 576 |
| Total debt requirements |  | 200,009 |  | 193,429 |  | 6,580 |
| TRANSFER TO THE CITY'S GENERAL FUND |  | 17,276 |  | 14,228 |  | 3,048 |
| AMOUNT AVAILABLE FOR TRANSFER TO |  |  |  |  |  |  |
| THE RENEWAL AND REPLACEMENT FUND: |  |  |  |  |  |  |
| CAPITAL CONTRIBUTIONS |  | 80,771 |  | 71,857 |  | 8,914 |
| GENERAL |  | 141,231 |  | 108,588 |  | 32,643 |
| Total amount available for Renewal and Replacement Funds |  | 222,002 |  | 180,445 |  | 41,557 |
| TOTAL USES OF FUNDS | \$ | 759,471 | \$ | 703,860 | \$ | 55,611 |

The accompanying notes to the supplemental schedules is an integral part of this schedule.

# San Antonio Water System <br> SCHEDULE OF REVENUES AND THEIR DISPOSITION <br> COMPARED TO ANNUAL BUDGET <br> (amounts in thousands) <br> For the year ended December 31, 2017 

|  | Actual |  | Annual Budget |  | Variance |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SOURCES OF FUNDS |  |  |  |  |  |  |
| OPERATING REVENUES |  |  |  |  |  |  |
| Water delivery system | \$ | 202,264 | \$ | 197,985 | \$ | 4,279 |
| Water supply system |  | 202,143 |  | 200,427 |  | 1,716 |
| Wastewater System |  | 250,977 |  | 243,073 |  | 7,904 |
| Chilled water and steam system |  | 11,368 |  | 10,236 |  | 1,132 |
| Total operating revenues |  | 666,752 |  | 651,721 |  | 15,031 |
| NONOPERATING REVENUES |  |  |  |  |  |  |
| Interest earned and miscellaneous |  | 10,407 |  | 8,035 |  | 2,372 |
| Other financing sources (draw on equity) |  | 1,541 |  | 4,850 |  | $(3,309)$ |
| Total nonoperating revenues |  | 11,948 |  | 12,885 |  | (937) |
| CAPITAL CONTRIBUTIONS |  |  |  |  |  |  |
| Capital Recovery Fees |  | 72,846 |  | 56,103 |  | 16,743 |
| Contributions in Aid of Construction |  | 7,925 |  | - |  | 7,925 |
| Total capital contributions |  | 80,771 |  | 56,103 |  | 24,668 |
| TOTAL SOURCES OF FUNDS | \$ | 759,471 | \$ | 720,709 | \$ | 38,762 |
| USES OF FUNDS |  |  |  |  |  |  |
| OPERATION AND MAINTENANCE |  |  |  |  |  |  |
| Salaries and fringe benefits | \$ | 149,874 | \$ | 152,694 | \$ | 2,820 |
| Contractual services |  | 168,350 |  | 175,566 |  | 7,216 |
| Materials and supplies |  | 23,159 |  | 24,417 |  | 1,258 |
| Other charges |  | 9,156 |  | 10,647 |  | 1,491 |
| Less: Costs capitalized to Construction in Progress |  | $(32,219)$ |  | $(38,464)$ |  | $(6,245)$ |
| Total operation and maintenance |  | 318,320 |  | 324,860 |  | 6,540 |
| OPERATING RESERVE REQUIREMENT |  | 1,864 |  | 1,499 |  | (365) |
| DEBT REQUIREMENTS |  |  |  |  |  |  |
| Interest costs |  | 109,359 |  | 125,925 |  | 16,566 |
| Retirement of bonds |  | 87,953 |  | 95,426 |  | 7,473 |
| Other Debt Expense |  | 2,697 |  | 2,701 |  | 4 |
| Total debt requirements |  | 200,009 |  | 224,052 |  | 24,043 |
| TRANSFER TO THE CITY'S GENERAL FUND |  | 17,276 |  | 16,847 |  | (429) |
| AMOUNT AVAILABLE FOR TRANSFER TO |  |  |  |  |  |  |
| THE RENEWAL AND REPLACEMENT FUND: |  |  |  |  |  |  |
| CAPITAL CONTRIBUTIONS |  | 80,771 |  | 56,103 |  | $(24,668)$ |
| GENERAL |  | 141,231 |  | 97,348 |  | $(43,883)$ |
| Total amount available for Renewal and Replacement Funds |  | 222,002 |  | 153,451 |  | $(68,551)$ |
| TOTAL USES OF FUNDS | \$ | 759,471 | \$ | $\underline{720,709}$ | \$ | $\underline{(38,762)}$ |

The accompanying notes to the supplemental schedules is an integral part of this schedule.

## San Antonio Water System <br> SCHEDULE OF OPERATION AND MAINTENANCE EXPENSE BY ACCOUNT (SYSTEM FUND)

For the year ended December 31, 2017

| Account <br> Code | Classification | (amounts in thousands) |  |  |  |  |  | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Actual |  | Budget(as amended) |  | Variance |  |  |
|  |  |  |  |  | Under) |  |
| SALARIES AND FRINGE BENEFITS |  |  |  |  |  |  |  |  |
| 511100 | Salaries | \$ | 96,782 |  |  | \$ | 101,062 | \$ | 4,280 | 4.2\% |
| 511140 | Overtime Pay |  | 6,373 |  | 4,290 |  | $(2,083)$ | -48.6\% |
| 511150 | On-Call Pay |  | 663 |  | 528 |  | (135) | -25.6\% |
| 511160 | Employee Insurance |  | 15,392 |  | 16,336 |  | 944 | 5.8\% |
| 511162 | Employee Retirement |  | 20,707 |  | 20,684 |  | (23) | -0.1\% |
| 511164 | Compensation for Unused Sick Leave |  | 17 |  | 70 |  | 53 | 75.7\% |
| 511166 | Personal Leave Buyback |  | 929 |  | 950 |  | 21 | 2.2\% |
| 511168 | Vacation Pay |  | 1,412 |  | 1,200 |  | (212) | -17.7\% |
| 511170 | Incentive Pay |  | 99 |  | 74 |  | (25) | -33.8\% |
| 511175 | Other postemployment benefits |  | 7,500 |  | 7,500 |  | - | 0.0\% |
|  | Total Salaries and Fringe Benefits |  | 149,874 |  | 152,694 |  | 2,820 | 1.8\% |
| CONTRACTUAL SERVICES |  |  |  |  |  |  |  |  |
| 511210 | Operating Expense |  | 2,446 |  | 2,228 |  | (218) | -9.8\% |
| 511211 | Rental of Facilities |  | 368 |  | 297 |  | (71) | -23.9\% |
| 511212 | Alarm and Security |  | 1,868 |  | 1,939 |  | 71 | 3.7\% |
| 511214 | Shoe Reimbursement |  | 357 |  | 397 |  | 40 | 10.1\% |
| 511216 | Catering Services |  | 140 |  | 99 |  | (41) | -41.4\% |
| 511219 | Program Rebates |  | 1,588 |  | 3,675 |  | 2,087 | 56.8\% |
| 511220 | Maintenance Expense |  | 17,824 |  | 15,216 |  | $(2,608)$ | -17.1\% |
| 511221 | Street Cut Permit |  | 596 |  | 751 |  | 155 | 20.6\% |
| 511222 | Street Pavement Repair Fees |  | 1,535 |  | 1,620 |  | 85 | 5.2\% |
| 511223 | Preventative Maintenance |  | 135 |  | 102 |  | (33) | -32.4\% |
| 511224 | Corrective Maintenance |  | 1,334 |  | 1,717 |  | 383 | 22.3\% |
| 511225 | Damage Repair |  | 191 |  | 179 |  | (12) | -6.7\% |
| 511230 | Outside Equipment Rental |  | 321 |  | 281 |  | (40) | -14.2\% |
| 511240 | Travel |  | 146 |  | 245 |  | 99 | 40.4\% |
| 511245 | Training |  | 642 |  | 716 |  | 74 | 10.3\% |
| 511247 | Conferences |  | 44 |  | 126 |  | 82 | 65.1\% |
| 511250 | Memberships and Subscriptions |  | 388 |  | 447 |  | 59 | 13.2\% |
| 511260 | Utilities |  | 29,882 |  | 32,633 |  | 2,751 | 8.4\% |
| 511261 | Water Options \& Purchases |  | 43,158 |  | 45,165 |  | 2,007 | 4.4\% |
| 511265 | Groundwater District Payments |  | 24,339 |  | 24,705 |  | 366 | 1.5\% |
| 511270 | Postage |  | 2,161 |  | 2,294 |  | 133 | 5.8\% |
| 511310 | Educational Assistance - Tuition |  | 114 |  | 167 |  | 53 | 31.7\% |
| 511312 | Contractual Professional Services |  | 27,341 |  | 28,786 |  | 1,445 | 5.0\% |
| 511313 | Inspection and Assessment Fees |  | 1,920 |  | 2,250 |  | 330 | 14.7\% |
| 511315 | Temporary Employees |  | 1,259 |  | 598 |  | (661) | -110.5\% |
| 511320 | Legal Services |  | 1,355 |  | 1,925 |  | 570 | 29.6\% |
| 511370 | Communications |  | 1,449 |  | 1,657 |  | 208 | 12.6\% |
| 511381 | Software and Hardware Maintenance |  | 5,449 |  | 5,351 |  | (98) | -1.8\% |
|  | Total Contractual Services |  | 168,350 |  | 175,566 |  | 7,216 | 4.1\% |

## San Antonio Water System <br> SCHEDULE OF OPERATION AND MAINTENANCE EXPENSE BY ACCOUNT (SYSTEM FUND)

For the year ended December 31, 2017


The accompanying notes to the supplemental schedules is an integral part of this schedule.

San Antonio Water System<br>Notes to Supplemental Schedules<br>For the years ended December 31, 2017 and 2016

## Note 1 - Basis for Presentation

The Schedule of Revenues and Other Financial Sources and Their Disposition, the Schedule of Revenues and Their Disposition Compared to Annual Budget and the Schedule of Operation and Maintenance Expense by Account (Supplemental Schedules) have all been prepared in accordance with City Ordinance No. 75686 ("City Ordinance"). City Ordinance requires that gross revenues of SAWS be applied in sequence to: (1) System Fund for payment of current maintenance and operating expenses including a two-month reserve amount based upon the budgeted amount of 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. Further, City Ordinance stipulates that the annual budget shall reflect an estimate of Gross Revenues and an estimate of the disposition of these revenues in accordance with the funds flow requirements of the City Ordinance.

## Note 2 - Reconciliation to Basic Financial Statements

City Ordinance defines Operating and Maintenance expenses as consisting of:

- the cost of all salaries, labor, material, repairs, and extensions necessary to maintain operation of the system,
- payments to pension, retirement, health, and other employee benefit plans,
- payments under contracts for the purchase of water supply, treatment of sewage, or other materials, goods or services for the system,
- payments to auditors, attorneys, and other consultants incurred in complying with the obligations of the system,
- payments made on or respect of obtaining and maintaining any credit facility, and
- any legal liability of the system arising out of the operation, maintenance, or condition of the system, but excluding any allowance for depreciation, property retirement, depletion, obsolescence, and any other not requiring an outlay of cash and any interest on any debt.

With regard to the following items, the requirements of City Ordinance are not consistent with generally accepted accounting principles and result in differences between amounts reported in the Basic Financial Statements for operating and maintenance costs and the amounts reported in the Supplemental Schedules.

San Antonio Water System<br>Notes to Supplemental Schedules

For the years ended December 31, 2017 and 2016
SAWS provides certain pension, health care and life insurance benefits for employees upon retirement. The amounts reported for these benefits in the Supplemental Schedules are based on actual payments made for these benefits, including any contributions to trusts established to pre-fund these benefits. Expenses reported in the Basic Financial Statements related to these benefits are determined in accordance with generally accepted accounting principles as prescribed by the Governmental Accounting Standards Board and may be greater or less than actual payments made by SAWS for these benefits in a given year.

Periodically SAWS reviews its capital assets for possible impairment. Impaired assets are written down to their estimated fair value. As these write-offs do not require the outlay of cash, they do not meet the definition of operating and maintenance costs of SAWS in accordance with the City Ordinance. As a result, this expense has been excluded from the Supplemental Schedules.

The operation and maintenance cost reported in the Supplemental Schedules reconciles to the Basic Financial Statements as follows:

|  | (amounts in thousands) <br> Year Ended December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  |
| Operating and maintenance costs per |  |  |  |  |
| Supplemental Schedules | \$ | 318,320 | \$ | 315,239 |
| Unfunded/(overfunded) benefit expense |  | $(1,485)$ |  | $(2,191)$ |
| Write-off of asset impairments |  | 1,663 |  | 2,144 |
| Portion of overfunded/(unfunded) benefits capitalized to Construction in Progress |  | (56) |  | 203 |
| Operating expenses before depreciation per Statement of Revenues, Expenses and Changes in Net Position | \$ | 318,442 | \$ | 315,395 |

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## STATISTICAL SECTION

## San Antonio Water System <br> Statistical Section <br> Table of Contents

This part of the SAWS comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about $S A W S^{\prime}$ overall financial health.

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Sources: Unless otherwise noted, information presented in these schedules was obtained from SAWS' comprehensive annual financial reports or internal information systems.

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

Net Position
Net investment in capital assets
Restricted for operating reserve
Restricted for debt service
Restricted for debt service reserve
Restricted for construction
Unrestricted
Total Net Position

| Fiscal Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | 2016 | 2015 (a) | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| 2,217,283 | 2,106,957 | 1,939,292 | 1,730,265 | 1,661,644 | 1,602,507 | 1,496,132 | 1,451,222 | 1,431,578 | 1,381,460 |
| 54,143 | 52,279 | 45,801 | 43,385 | 40,656 | 38,389 | 35,227 | 33,955 | 34,649 | 32,257 |
| 59,719 | 60,396 | 56,775 | 47,123 | 39,710 | 34,254 | 34,862 | 31,222 | 27,511 | 25,790 |
| 56,364 | 56,016 | 62,716 | 66,665 | 62,560 | 58,681 | 54,696 | 50,688 | 41,479 | 11,222 |
| 188,227 | 150,198 | 168,968 | 140,937 | 101,212 | 83,968 | 98,455 | 98,555 | 89,888 | 85,191 |
| 278,542 | 187,503 | 126,352 | 137,207 | 118,285 | 116,179 | 120,363 | 113,419 | 153,503 | 189,929 |
| \$ 2,854,278 | \$ 2,613,349 | \$ 2,399,904 | \$ 2,165,582 | \$ 2,024,067 | \$ 1,933,978 | \$ 1,839,735 | \$ 1,779,061 | \$ 1,778,608 | \$ 1,725,849 |

(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.

(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.

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

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 (a) |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Assets: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Capital Assets, net of accumulated depreciation | \$ | 5,051,777 | \$ | 4,886,091 | \$ | 4,647,786 | \$ | 4,089,478 | \$ | 3,964,000 | \$ | 3,771,228 | \$ | 3,553,065 | \$ | 3,362,867 | \$ | 3,174,264 | \$ | 2,967,190 |
| Cash and Investments |  | 924,958 |  | 928,593 |  | 853,417 |  | 819,232 |  | 689,483 |  | 517,876 |  | 528,761 |  | 575,629 |  | 576,652 |  | 478,919 |
| Other Assets |  | 87,530 |  | 80,976 |  | 81,889 |  | 79,478 |  | 75,998 |  | 71,241 |  | 63,658 |  | 75,578 |  | 74,823 |  | 71,110 |
| Total Assets |  | 6,064,265 |  | 5,895,660 |  | 5,583,092 |  | 4,988,188 |  | 4,729,481 |  | 4,360,345 |  | 4,145,484 |  | 4,014,074 |  | 3,825,739 |  | 3,517,219 |
| Deferred Outflows of Resources |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Deferred Charge on Bond Refunding |  | 48,055 |  | 54,317 |  | 30,103 |  | 29,086 |  | 30,943 |  | 30,561 |  | 2,494 |  | - |  | - |  | - |
| Deferred outflows - Pension |  | 33,428 |  | 28,115 |  | 16,083 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Accumulated Decrease in Fair Value of Hedging Derivatives |  | 11,857 |  | 12,965 |  | 16,394 |  | 15,520 |  | 8,372 |  | 19,746 |  | 18,380 |  | 5,575 |  | - |  | - |
| Total Deferred Outflows of Resources |  | 93,340 |  | 95,397 |  | 62,580 |  | 44,606 |  | 39,315 |  | 50,307 |  | 20,874 |  | 5,575 |  | - |  | - |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Revenue Bonds Payable (net) |  | 2,735,739 |  | 2,840,282 |  | 2,730,363 |  | 2,507,419 |  | 2,348,834 |  | 2,083,545 |  | 1,898,839 |  | 1,832,523 |  | 1,743,689 |  | 1,408,182 |
| Commercial Paper and Flexible Rate Notes |  | 278,060 |  | 241,610 |  | 224,005 |  | 138,550 |  | 186,655 |  | 170,745 |  | 214,930 |  | 244,650 |  | 173,650 |  | 261,115 |
| Other Liabilities |  | 287,200 |  | 293,023 |  | 284,617 |  | 221,243 |  | 209,240 |  | 222,384 |  | 212,854 |  | 163,415 |  | 129,792 |  | 122,073 |
| Total Liabilities |  | 3,300,999 |  | 3,374,915 |  | 3,238,985 |  | 2,867,212 |  | 2,744,729 |  | 2,476,674 |  | 2,326,623 |  | 2,240,588 |  | 2,047,131 |  | 1,791,370 |
| Deferred Inflows of Resources |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Deferred inflows - pension |  | 2,328 |  | 2,793 |  | 6,783 |  | - |  | - |  | - |  | - |  | - |  | - |  | - |
| Net Position in System | \$ | 2,854,278 | \$ | 2,613,349 | \$ | 2,399,904 | \$ | 2,165,582 | \$ | 2,024,067 | \$ | 1,933,978 | \$ | 1,839,735 | \$ | 1,779,061 | \$ | 1,778,608 | \$ | 1,725,849 |
| Percentage Net Position in System |  | 46.4\% |  | 43.6\% |  | 42.5\% |  | 43.0\% |  | 42.4\% |  | 43.8\% |  | 44.2\% |  | 44.3\% |  | 46.5\% |  | 49.1\% |

(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.

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

(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. Includes the State-Imposed TCEQ fee. See Schedule 8-16 for the rate information.
(d) Represents 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.

| San Antonio Water System Schedule 5 - Sales by Source (accrual basis of accounting) (amounts in thousands) |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unaudited | Fiscal Year |  |  |  |  |  |  |  |  |  |
|  | 2017 | 2016 | 2015 (a) | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| Water Sales: |  |  |  |  |  |  |  |  |  |  |
| Residential Class | \$113,070 | \$100,982 | \$95,068 | \$74,062 | \$71,536 | \$72,620 | \$79,332 | \$66,410 | \$65,333 | \$68,516 |
| General Class | 60,977 | 63,781 | 56,041 | 37,878 | 35,099 | 35,504 | 33,571 | 32,326 | 32,943 | 32,330 |
| Wholesale Class | 801 | 767 | 432 | 3,233 | 1,640 | 1,255 | 234 | 136 | 204 | 179 |
| Irrigation Class | 21,915 | 20,239 | 13,113 | 11,011 | 10,893 | 11,164 | 11,722 | 12,909 | 12,176 | 16,124 |
| Total Water | 196,763 | 185,769 | 164,654 | 126,184 | 119,168 | 120,543 | 124,859 | 111,781 | 110,656 | 117,149 |
| Water Supply Fees |  |  |  |  |  |  |  |  |  |  |
| Residential Class | 85,809 | 73,518 | 60,067 | 48,270 | 43,121 | 44,163 | 51,696 | 45,312 | 45,909 | 49,042 |
| General Class | 47,129 | 42,748 | 44,746 | 39,355 | 32,393 | 32,537 | 31,586 | 29,764 | 30,403 | 30,140 |
| Wholesale Class | 874 | 865 | 588 | 7,196 | 3,227 | 2,294 | 202 | 158 | 178 | 160 |
| Irrigation Class | 16,571 | 15,437 | 14,491 | 12,551 | 12,057 | 12,058 | 13,029 | 7,154 | 6,288 | 8,016 |
| Total Water Supply Fees | 150,383 | 132,568 | 119,892 | 107,372 | 90,798 | 91,052 | 96,513 | 82,388 | 82,778 | 87,358 |
| EAA Pass-through fees (b) |  |  |  |  |  |  |  |  |  |  |
| Residential Class | 13,108 | 14,110 | 10,915 | 9,654 | 9,905 | 10,841 | 4,767 | 5,423 | 3,605 | 5,893 |
| General Class | 8,865 | 9,640 | 7,380 | 6,874 | 6,991 | 7,352 | 2,930 | 3,648 | 2,387 | 3,622 |
| Wholesale Class | 123 | 157 | 114 | 1,271 | 659 | 509 | 18 | 19 | 14 | 19 |
| Irrigation Class | 1,434 | 1,605 | 1,136 | 1,061 | 1,134 | 1,242 | 540 | 765 | 494 | 963 |
| Total Pass-through fees | 23,530 | 25,512 | 19,545 | 18,860 | 18,689 | 19,944 | 8,255 | 9,855 | 6,500 | 10,497 |
| Conservation Fees: |  |  |  |  |  |  |  |  |  |  |
| Residential Class | 2,727 | 2,189 | 2,246 | 1,956 | 2,454 | 2,986 | 3,682 | 2,814 | 2,962 | 3,663 |
| General Class | 8,345 | 8,453 | 7,004 | 6,498 | 6,606 | 7,040 | 6,702 | 4,461 | 4,008 | 3,938 |
| Total Conservation | 11,072 | 10,642 | 9,250 | 8,454 | 9,060 | 10,026 | 10,384 | 7,275 | 6,970 | 7,601 |
| Wastewater Sales: |  |  |  |  |  |  |  |  |  |  |
| Residential Class | 142,530 | 134,860 | 124,992 | 125,051 | 116,775 | 98,674 | 88,702 | 79,118 | 81,202 | 75,752 |
| General Class | 88,551 | 80,696 | 71,267 | 68,371 | 62,300 | 54,175 | 48,271 | 41,768 | 41,343 | 40,034 |
| Wholesale Class | 9,936 | 8,729 | 8,064 | 7,848 | 7,599 | 6,761 | 6,105 | 5,044 | 5,225 | 5,281 |
| Surcharge | 6,056 | 6,292 | 5,401 | 5,450 | 5,438 | 5,134 | 4,815 | 4,861 | 4,648 | 4,614 |
| Total Wastewater | 247,073 | 230,577 | 209,724 | 206,720 | 192,112 | 164,744 | 147,893 | 130,791 | 132,418 | 125,681 |
| TCEQ Pass-through fees (c) |  |  |  |  |  |  |  |  |  |  |
| Water customers | 1,420 | 1,460 | 1,412 | 1,169 | 1,086 | 1,064 | 1,178 | 964 | - | - |
| Wastewater customers | 435 | 448 | 429 | 433 | 347 | 411 | 464 | 280 | - | - |
|  | 1,855 | 1,908 | 1,841 | 1,602 | 1,433 | 1,475 | 1,642 | 1,244 | - | - |
| Recycled Water Sales | 5,651 | 5,691 | 5,097 | 5,086 | 5,161 | 5,074 | 5,068 | 3,955 | 4,393 | 4,287 |
| Stormwater Fees | 5,209 | 4,967 | 4,797 | 4,420 | 5,058 | 4,558 | 4,158 | 3,745 | 3,358 | 3,037 |
| Chilled Water \& Steam (d) | 11,368 | 11,541 | 11,184 | 11,251 | 12,719 | 12,485 | 11,715 | 12,337 | 12,714 | 12,758 |
| Miscellaneous Fees and Charges | 17,709 | 17,641 | 16,769 | 13,860 | 12,787 | 12,427 | 10,418 | 8,989 | 9,266 | 9,541 |
| Provision for Uncollectible Accounts | $(3,860)$ | $(4,359)$ | $(5,721)$ | $(4,166)$ | $(4,646)$ | $(3,800)$ | $(2,811)$ | $(3,463)$ | $(3,711)$ | $(3,288)$ |
| Total Operating Revenue | \$666,752 | \$622,457 | \$557,032 | \$499,643 | \$462,339 | \$438,528 | \$418,094 | \$368,897 | 365,342 | $\underline{\text { 374,621 }}$ |

(a) Increase in water related revenues from 2014 to 2015 is partially due to the merger of SAWS and SAWS District Special effective January 1, 2015.
(b) EAA pass-through fees are designed to recoup fees charged by Edwards Aquifer Authority (EAA). The fee is charged based on water usage. Any previous over or under recovery of fees in considered in determining the fees to be charged each year.
(c) TCEQ pass-through fees are designed to recoup fees charged by the Texas Commission on Environmental Quality (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

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2015 (a) | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| Water Sales (b): |  |  |  |  |  |  |  |  |  |  |
| Residential Class | 36,566 | 35,360 | 35,769 | 29,310 | 29,206 | 30,070 | 34,153 | 28,932 | 30,667 | 33,025 |
| General Class | 24,731 | 24,159 | 23,212 | 20,870 | 20,614 | 20,393 | 20,986 | 19,465 | 20,309 | 20,297 |
| Wholesale Class | 344 | 393 | 354 | 3,861 | 1,943 | 1,412 | 128 | 101 | 119 | 108 |
| Irrigation Class | 4,000 | 4,022 | 3,561 | 3,220 | 3,345 | 3,445 | 3,866 | 4,080 | 4,200 | 5,398 |
| Total Water | 65,641 | 63,934 | 62,896 | 57,261 | 55,108 | 55,320 | 59,133 | 52,578 | 55,295 | 58,828 |
| Wastewater Sales: |  |  |  |  |  |  |  |  |  |  |
| Residential Class | 26,809 | 26,462 | 26,048 | 27,896 | 27,617 | 26,572 | 27,371 | 26,746 | 29,825 | 28,148 |
| General Class | 21,654 | 20,503 | 20,281 | 20,502 | 20,100 | 20,066 | 20,134 | 20,002 | 20,338 | 20,352 |
| Wholesale Class | 2,482 | 2,317 | 2,234 | 2,291 | 2,359 | 2,417 | 2,413 | 1,404 | 1,824 | 1,847 |
| Total Wastewater | 50,945 | 49,282 | 48,563 | 50,689 | 50,076 | 49,055 | 49,918 | 48,152 | 51,987 | 50,347 |
| Conservation - Residential Class (c, d, \& e) | 9,572 | 6,611 | 2,284 | 2,296 | 2,520 | 3,026 | 4,106 | 2,935 | 3,469 | 3,948 |
| Recycled Water Sales | 18,949 | 18,436 | 18,421 | 18,323 | 18,359 | 18,129 | 18,990 | 14,968 | 16,321 | 16,559 |

(a) Increase in water usage from 2014 to 2015 is primarily due to the merger of SAWS and SAWS District Special Project effect 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 allocated 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, for 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

Schedule 7 - Number of Customer Connections
(average number billed)
Unaudited

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2015 (a) | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| Water (b): |  |  |  |  |  |  |  |  |  |  |
| Residential Class | 465,241 | 457,485 | 450,725 | 347,789 | 343,667 | 339,204 | 335,280 | 331,853 | 327,610 | 323,754 |
| General Class | 28,518 | 29,155 | 28,366 | 23,777 | 23,713 | 23,582 | 23,369 | 23,225 | 23,242 | 23,104 |
| Wholesale Class | 9 | 9 | 9 | 7 | 8 | 8 | 7 | 7 | 7 | 7 |
| Total Water | 493,768 | 486,649 | 479,100 | 371,573 | 367,388 | 362,794 | 358,656 | 355,085 | 350,859 | 346,865 |
| Irrigation Class (c) | 10,260 | 9,291 | 9,829 | 8,966 | 8,821 | 8,633 | 8,479 | 8,350 | 8,202 | 7,940 |
| Wastewater: |  |  |  |  |  |  |  |  |  |  |
| Residential Class | 416,996 | 409,988 | 402,409 | 395,574 | 390,256 | 383,553 | 378,380 | 373,755 | 368,948 | 361,966 |
| General Class | 25,544 | 25,352 | 25,175 | 25,079 | 25,021 | 24,824 | 24,550 | 24,407 | 24,285 | 23,999 |
| Wholesale Class | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 13 |
| Total Wastewater | 442,552 | 435,352 | 427,596 | 420,665 | 415,289 | 408,389 | 402,942 | 398,174 | 393,245 | 385,978 |
| Conservation - Residential Class (d \& e) | 159,994 | 83,991 | 18,539 | 20,716 | 20,867 | 23,804 | 33,708 | 21,791 | 26,665 | 29,973 |
| Recycled Water | 112 | 107 | 109 | 102 | 97 | 92 | 80 | 81 | 86 | 76 |

(a) Increase in water connections from 2014 to 2015 is primarily due to the merger of SAWS and SAWS District Special 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 allocated 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, for 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 connection contributing to the conservation allocation from 2016 to 2017 rs

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

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Water |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8' | \$ | 11.64 | \$ | 10.72 | \$ | 7.57 | \$ | 7.31 | \$ | 7.14 | \$ | 7.14 | \$ | 6.91 | \$ | 6.91 | \$ | 6.77 | \$ | 6.56 |
| $3 / 4 "$ | \$ | 15.41 | \$ | 14.19 | \$ | 10.63 | \$ | 10.26 | \$ | 10.01 | \$ | 10.01 | \$ | 9.68 | \$ | 9.68 | \$ | 8.59 | \$ | 8.32 |
| $1{ }^{\prime \prime}$ | \$ | 22.90 | \$ | 21.09 | \$ | 16.72 | \$ | 16.14 | \$ | 15.75 | \$ | 15.75 | \$ | 15.23 | \$ | 15.23 | \$ | 12.49 | \$ | 12.10 |
| 1-1/2" | \$ | 41.63 | \$ | 38.33 | \$ | 31.94 | \$ | 30.83 | \$ | 30.09 | \$ | 30.09 | \$ | 29.10 | \$ | 29.10 | \$ | 22.25 | \$ | 21.56 |
| 2 " | \$ | 64.08 | \$ | 59.01 | \$ | 50.18 | \$ | 48.44 | \$ | 47.28 | \$ | 47.28 | \$ | 45.73 | \$ | 45.73 | \$ | 33.95 | \$ | 32.90 |
| $3 "$ | \$ | 116.53 | \$ | 107.30 | \$ | 92.80 | \$ | 89.58 | \$ | 87.44 | \$ | 87.44 | \$ | 84.56 | \$ | 84.56 | \$ | 61.27 | \$ | 59.37 |
| $4 "$ | \$ | 191.42 | \$ | 176.26 | \$ | 153.67 | \$ | 148.33 | \$ | 144.78 | \$ | 144.78 | \$ | 140.02 | \$ | 140.02 | \$ | 100.30 | \$ | 97.19 |
| $6 "$ | \$ | 378.67 | \$ | 348.68 | \$ | 305.86 | \$ | 295.23 | \$ | 288.17 | \$ | 288.17 | \$ | 278.69 | \$ | 278.69 | \$ | 197.89 | \$ | 191.75 |
| $8{ }^{\prime \prime}$ | \$ | 603.37 | \$ | 555.59 | \$ | 488.47 | \$ | 471.50 | \$ | 460.22 | \$ | 460.22 | \$ | 445.09 | \$ | 445.09 | \$ | 314.96 | \$ | 305.19 |
| $10 "$ | \$ | 865.51 | \$ | 796.97 | \$ | 701.52 | \$ | 677.14 | \$ | 660.95 | \$ | 660.95 | \$ | 639.22 | \$ | 639.22 | \$ | 451.57 | \$ | 437.57 |
| 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 | \$ | 841.86 | \$ | 815.76 |
| Reduction applied if usage is less than 2,993 gallons | \$ | (2.32) | \$ | (2.14) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 2,992 Gallons | \$ | 0.0672 | \$ | 0.0619 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,497 Gallons | \$ | 0.1176 | \$ | 0.1083 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,496 Gallons | \$ | 0.1511 | \$ | 0.1391 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,496 Gallons | \$ | 0.1847 | \$ | 0.1701 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 2,992 Gallons | \$ | 0.2183 | \$ | 0.2010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 4,489 Gallons | \$ | 0.2520 | \$ | 0.2320 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 5,237 Gallons | \$ | 0.3023 | \$ | 0.2784 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Over 20,199 Gallons | \$ | 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 |  |  |  |  |
| Standard: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 7,481 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.0906 | \$ | 0.0878 |
| Next 5,236 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1309 | \$ | 0.1268 |
| Next 4,488 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.2058 | \$ | 0.1994 |
| Over 17,205 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.3288 | \$ | 0.3186 |
| Seasonal (a): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 7,481 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.0906 | \$ | 0.0878 |
| Next 5,236 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1423 | \$ | 0.1379 |
| Next 4,488 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.2217 | \$ | 0.2148 |
| Over 17,205 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.4246 | \$ | 0.4114 |
| Sewer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size (b): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8' | \$ | 12.98 | \$ | 12.29 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $3 / 4$ " | \$ | 14.28 | \$ | 13.52 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $1{ }^{\prime \prime}$ | \$ | 16.22 | \$ | 15.36 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| 1-1/2" | \$ | 22.71 | \$ | 21.51 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| 2 " | \$ | 32.45 | \$ | 30.73 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $3 "$ | \$ | 64.89 | \$ | 61.45 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $4 "$ | \$ | 97.34 | \$ | 92.18 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $6{ }^{\prime \prime}$ | \$ | 162.23 | \$ | 153.63 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $8^{\prime \prime}$ | \$ | 259.56 | \$ | 245.80 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $10^{\prime \prime}$ | \$ | 389.36 | \$ | 368.71 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| 12 " | \$ | 519.14 | \$ | 491.61 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| Usage per 100 gallons (c): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1,497 gallons - 2,992 gallons | \$ | 0.2774 | \$ | 0.2627 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Over 2,992 Gallons | \$ | 0.4162 | \$ | 0.3941 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All gallons in excess of 1,496 |  |  |  |  | \$ | 0.3365 | \$ | 0.3163 | \$ | 0.3047 | \$ | 0.2615 | \$ | 0.2302 | \$ | 0.2302 | \$ | 0.2057 | \$ | 0.1953 |

(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.
(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 billings
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)

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Water |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8' | \$ | 15.14 | \$ | 13.94 | \$ | 9.86 | \$ | 9.52 | \$ | 9.29 | \$ | 9.29 | \$ | 8.98 | \$ | 8.98 | \$ | 8.78 | \$ | 8.51 |
| $3 / 4 "$ | \$ | 20.03 | \$ | 18.44 | \$ | 13.82 | \$ | 13.34 | \$ | 13.02 | \$ | 13.02 | \$ | 12.59 | \$ | 12.59 | \$ | 11.16 | \$ | 10.81 |
| $1 "$ | \$ | 29.78 | \$ | 27.42 | \$ | 21.72 | \$ | 20.97 | \$ | 20.47 | \$ | 20.47 | \$ | 19.80 | \$ | 19.80 | \$ | 16.23 | \$ | 15.73 |
| 1-1/2" | \$ | 54.12 | \$ | 49.83 | \$ | 41.52 | \$ | 40.08 | \$ | 39.12 | \$ | 39.12 | \$ | 37.83 | \$ | 37.83 | \$ | 28.92 | \$ | 28.02 |
| 2 " | \$ | 83.30 | \$ | 76.70 | \$ | 65.26 | \$ | 62.99 | \$ | 61.48 | \$ | 61.48 | \$ | 59.46 | \$ | 59.46 | \$ | 44.14 | \$ | 42.77 |
| $3 "$ | \$ | 151.49 | \$ | 139.49 | \$ | 120.66 | \$ | 116.47 | \$ | 113.68 | \$ | 113.68 | \$ | 109.94 | \$ | 109.94 | \$ | 79.65 | \$ | 77.18 |
| $4 "$ | \$ | 248.84 | \$ | 229.13 | \$ | 199.78 | \$ | 192.84 | \$ | 188.23 | \$ | 188.23 | \$ | 182.04 | \$ | 182.04 | \$ | 130.39 | \$ | 126.35 |
| $6 "$ | \$ | 492.27 | \$ | 453.29 | \$ | 397.62 | \$ | 383.80 | \$ | 374.62 | \$ | 374.62 | \$ | 362.30 | \$ | 362.30 | \$ | 257.24 | \$ | 249.26 |
| $8{ }^{\prime \prime}$ | \$ | 784.37 | \$ | 722.26 | \$ | 635.03 | \$ | 612.96 | \$ | 598.30 | \$ | 598.30 | \$ | 578.63 | \$ | 578.63 | \$ | 409.45 | \$ | 396.75 |
| 10 " | S | 1,125.16 | \$ | 1,036.06 | \$ | 911.98 | \$ | 880.29 | \$ | 859.24 | \$ | 859.24 | \$ | 830.99 | \$ | 830.99 | \$ | 587.03 | \$ | 568.83 |
| $12 "$ | \$ | 2,098.87 | \$ | 1,932.66 | \$ | 1,703.33 | \$ | 1,644.14 | \$ | 1,604.82 | \$ | 1,604.82 | \$ | 1,552.05 | \$ | 1,552.05 | \$ | 1,094.42 | \$ | 1,060.48 |
| Reduction applied if usage is less than 2,993 gallons | \$ | (3.03) | \$ | (2.79) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 2,992 Gallons | \$ | 0.0873 | \$ | 0.0804 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,497 Gallons | \$ | 0.1528 | \$ | 0.1407 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,496 Gallons | \$ | 0.1965 | \$ | 0.1809 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,496 Gallons | \$ | 0.2401 | \$ | 0.2211 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 2,992 Gallons | \$ | 0.2838 | \$ | 0.2613 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 4,489 Gallons | \$ | 0.3275 | \$ | 0.3016 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 5,237 Gallons | \$ | 0.3930 | \$ | 0.3619 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Over 20,199 Gallons | \$ | 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 |  |  |  |  |
| Standard: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 7,481 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1176 | \$ | 0.1140 |
| Next 5,236 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1702 | \$ | 0.1649 |
| Next 4,488 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.2674 | \$ | 0.2591 |
| Over 17,205 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.4274 | \$ | 0.4141 |
| Seasonal (a): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 7,481 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1176 | \$ | 0.1140 |
| Next 5,236 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1850 | \$ | 0.1793 |
| Next 4,488 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.2882 | \$ | 0.2793 |
| Over 17,205 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.5519 | \$ | 0.5348 |
| Sewer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size (b): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8' | \$ | 15.58 | \$ | 14.75 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| $3 / 4{ }^{\prime \prime}$ | \$ | 17.14 | \$ | 16.23 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| $1{ }^{\prime \prime}$ | \$ | 19.47 | \$ | 18.44 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| 1-1/2" | \$ | 27.26 | \$ | 25.81 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| 2 " | \$ | 38.95 | \$ | 36.88 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| $3 "$ | \$ | 77.87 | \$ | 73.74 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| $4 "$ | \$ | 116.81 | \$ | 110.62 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| $6 "$ | \$ | 194.68 | \$ | 184.36 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| $8{ }^{\prime \prime}$ | \$ | 311.49 | \$ | 294.97 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| $10^{\prime \prime}$ | \$ | 467.23 | \$ | 442.45 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| 12 " | \$ | 622.97 | \$ | 589.93 | \$ | 15.25 | \$ | 14.33 | \$ | 13.81 | \$ | 11.85 | \$ | 10.43 | \$ | 10.43 | \$ | 9.32 | \$ | 8.85 |
| Usage per 100 gallons (c): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1,497 gallons - 2,992 gallons | \$ | 0.3330 | \$ | 0.3153 | \$ | 0.4038 | \$ | 0.3795 | \$ | 0.3656 | \$ | 0.3138 | \$ | 0.2762 | \$ | 0.2762 | \$ | 0.2468 | \$ | 0.2343 |
| Over 2,992 Gallons | \$ | 0.4994 | \$ | 0.4729 | \$ | 0.4038 | \$ | 0.3795 | \$ | 0.3656 | \$ | 0.3138 | \$ | 0.2762 | \$ | 0.2762 | \$ | 0.2468 | \$ | 0.2343 |

(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.
(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 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)

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Water |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8" | \$ | 12.58 | \$ | 11.58 | \$ | 10.53 | \$ | 10.16 | \$ | 9.92 | \$ | 9.92 | \$ | 9.59 | \$ | 9.59 | \$ | 9.81 | \$ | 9.51 |
| 3/4" | \$ | 17.97 | \$ | 16.55 | \$ | 15.05 | \$ | 14.53 | \$ | 14.18 | \$ | 14.18 | \$ | 13.71 | \$ | 13.71 | \$ | 13.16 | \$ | 12.75 |
| $1{ }^{\prime \prime}$ | \$ | 28.74 | \$ | 26.46 | \$ | 24.08 | \$ | 23.24 | \$ | 22.68 | \$ | 22.68 | \$ | 21.93 | \$ | 21.93 | \$ | 19.21 | \$ | 18.61 |
| 1-1/2" | \$ | 55.65 | \$ | 51.24 | \$ | 46.65 | \$ | 45.03 | \$ | 43.95 | \$ | 43.95 | \$ | 42.50 | \$ | 42.50 | \$ | 35.03 | \$ | 33.94 |
| 2 " | \$ | 87.88 | \$ | 80.92 | \$ | 73.74 | \$ | 71.18 | \$ | 69.48 | \$ | 69.48 | \$ | 67.20 | \$ | 67.20 | \$ | 52.83 | \$ | 51.19 |
| $3 "$ | \$ | 163.19 | \$ | 150.27 | \$ | 136.96 | \$ | 132.20 | \$ | 129.04 | \$ | 129.04 | \$ | 124.80 | \$ | 124.80 | \$ | 106.92 | \$ | 103.60 |
| $4 "$ | \$ | 270.74 | \$ | 249.30 | \$ | 227.28 | \$ | 219.38 | \$ | 214.13 | \$ | 214.13 | \$ | 207.09 | \$ | 207.09 | \$ | 176.40 | \$ | 170.93 |
| $6 "$ | \$ | 539.61 | \$ | 496.88 | \$ | 453.06 | \$ | 437.32 | \$ | 426.86 | \$ | 426.86 | \$ | 412.82 | \$ | 412.82 | \$ | 350.03 | \$ | 339.18 |
| $8{ }^{\prime \prime}$ | \$ | 862.31 | \$ | 794.02 | \$ | 723.99 | \$ | 698.83 | \$ | 682.12 | \$ | 682.12 | \$ | 659.69 | \$ | 659.69 | \$ | 543.20 | \$ | 526.36 |
| 10 " | \$ | 1,238.74 | \$ | 1,140.64 | \$ | 1,040.08 | \$ | 1,003.94 | \$ | 979.93 | \$ | 979.93 | \$ | 947.71 | \$ | 947.71 | \$ | 755.89 | \$ | 732.45 |
| 12 " | \$ | 2,314.31 | \$ | 2,131.04 | \$ | 1,943.21 | \$ | 1,875.69 | \$ | 1,830.83 | \$ | 1,830.83 | \$ | 1,770.63 | \$ | 1,770.63 | \$ | 1,191.85 | \$ | 1,154.89 |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Base (a) | \$ | 0.1644 | \$ | 0.1514 | \$ | 0.1218 | \$ | 0.1176 | \$ | 0.1148 | \$ | 0.1148 | \$ | 0.1110 | \$ | 0.1110 |  |  |  |  |
| 100-125\% of base | \$ | 0.1892 | \$ | 0.1742 | \$ | 0.1457 | \$ | 0.1406 | \$ | 0.1372 | \$ | 0.1372 | \$ | 0.1327 | \$ | 0.1327 |  |  |  |  |
| 125-175\% of base | \$ | 0.2467 | \$ | 0.2272 | \$ | 0.2042 | \$ | 0.1971 | \$ | 0.1924 | \$ | 0.1924 | \$ | 0.1861 | \$ | 0.1861 |  |  |  |  |
| Over 175\% of base | \$ | 0.2879 | \$ | 0.2651 | \$ | 0.2991 | \$ | 0.2887 | \$ | 0.2818 | \$ | 0.2818 | \$ | 0.2725 | \$ | 0.2725 |  |  |  |  |



| Sewer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Availability Charge by meter size (c): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| By meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8" | \$ | 12.98 | \$ | 12.29 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| 3/4" | \$ | 14.28 | \$ | 13.52 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $1{ }^{\prime \prime}$ | \$ | 16.22 | \$ | 15.36 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| 1-1/2" | \$ | 22.71 | \$ | 21.51 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $2{ }^{\prime \prime}$ | \$ | 32.45 | \$ | 30.73 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $3 "$ | \$ | 64.89 | \$ | 61.45 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $4 "$ | \$ | 97.34 | \$ | 92.18 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| $6 "$ | \$ | 162.23 | \$ | 153.63 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| 8" | \$ | 259.56 | \$ | 245.80 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| 10 " | \$ | 389.36 | \$ | 368.71 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| 12 " | \$ | 519.14 | \$ | 491.61 | \$ | 12.69 | \$ | 11.93 | \$ | 11.49 | \$ | 9.86 | \$ | 8.68 | \$ | 8.68 | \$ | 7.76 | \$ | 7.37 |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| All gallons in excess of 1,496 | \$ | 0.3717 | \$ | 0.3520 | \$ | 0.3365 | \$ | 0.3163 | \$ | 0.3047 | \$ | 0.2615 | \$ | 0.2302 | \$ | 0.2302 | \$ | 0.2057 | \$ | 0.1953 |

(a) Base was defined as $90 \%$ of the previous average annual usage.
(b) Base is defined as $100 \%$ of the previous average annual usage.
(c) Per 100 gallons. Includes the first 1,496 gallons.

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

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Water |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8" | \$ | 15.38 | \$ | 14.16 | \$ | 13.69 | \$ | 13.21 | \$ | 12.89 | \$ | 12.89 | \$ | 12.47 | \$ | 12.47 | \$ | 11.83 | \$ | 11.46 |
| 3/4" | \$ | 21.90 | \$ | 20.17 | \$ | 19.56 | \$ | 18.88 | \$ | 18.43 | \$ | 18.43 | \$ | 17.82 | \$ | 17.82 | \$ | 15.72 | \$ | 15.23 |
| $1{ }^{\prime \prime}$ | \$ | 34.91 | \$ | 32.15 | \$ | 31.29 | \$ | 30.20 | \$ | 29.48 | \$ | 29.48 | \$ | 28.51 | \$ | 28.51 | \$ | 22.94 | \$ | 22.23 |
| 1-1/2" | \$ | 67.43 | \$ | 62.09 | \$ | 60.65 | \$ | 58.54 | \$ | 57.14 | \$ | 57.14 | \$ | 55.26 | \$ | 55.26 | \$ | 41.69 | \$ | 40.40 |
| $2{ }^{\prime \prime}$ | \$ | 106.41 | \$ | 97.98 | \$ | 95.87 | \$ | 92.54 | \$ | 90.33 | \$ | 90.33 | \$ | 87.36 | \$ | 87.36 | \$ | 63.01 | \$ | 61.06 |
| $3 "$ | \$ | 197.45 | \$ | 181.81 | \$ | 178.06 | \$ | 171.87 | \$ | 167.76 | \$ | 167.76 | \$ | 162.24 | \$ | 162.24 | \$ | 125.31 | \$ | 121.42 |
| $4 "$ | \$ | 327.45 | \$ | 301.52 | \$ | 295.46 | \$ | 285.19 | \$ | 278.37 | \$ | 278.37 | \$ | 269.22 | \$ | 269.22 | \$ | 206.48 | \$ | 200.08 |
| $6 "$ | \$ | 652.52 | \$ | 600.85 | \$ | 588.98 | \$ | 568.51 | \$ | 554.91 | \$ | 554.91 | \$ | 536.66 | \$ | 536.66 | \$ | 409.39 | \$ | 396.70 |
| $8{ }^{\prime \prime}$ | \$ | 1,042.61 | \$ | 960.05 | \$ | 941.20 | \$ | 908.49 | \$ | 886.76 | \$ | 886.76 | \$ | 857.60 | \$ | 857.60 | \$ | 637.69 | \$ | 617.92 |
| 10 " | \$ | 1,497.69 | \$ | 1,379.09 | \$ | 1,352.11 | \$ | 1,305.13 | \$ | 1,273.92 | \$ | 1,273.92 | \$ | 1,232.03 | \$ | 1,232.03 | \$ | 891.35 | \$ | 863.71 |
| 12 " | \$ | 2,797.97 | \$ | 2,576.40 | \$ | 2,526.17 | \$ | 2,438.39 | \$ | 2,380.08 | \$ | 2,380.08 | \$ | 2,301.82 | \$ | 2,301.82 | \$ | 1,444.41 | \$ | 1,399.62 |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Base (a) | \$ | 0.2138 | \$ | 0.1969 | \$ | 0.1584 | \$ | 0.1529 | \$ | 0.1492 | \$ | 0.1492 | \$ | 0.1443 | \$ | 0.1443 |  |  |  |  |
| 100-125\% of base | \$ | 0.2460 | \$ | 0.2265 | \$ | 0.1893 | \$ | 0.1827 | \$ | 0.1783 | \$ | 0.1783 | \$ | 0.1724 | \$ | 0.1724 |  |  |  |  |
| 125-175\% of base | \$ | 0.3208 | \$ | 0.2954 | \$ | 0.2654 | \$ | 0.2562 | \$ | 0.2501 | \$ | 0.2501 | \$ | 0.2419 | \$ | 0.2419 |  |  |  |  |
| Over 175\% of base | \$ | 0.3742 | \$ | 0.3446 | \$ | 0.3887 | \$ | 0.3752 | \$ | 0.3662 | \$ | 0.3662 | \$ | 0.3542 | \$ | 0.3542 |  |  |  |  |



| Sewer |
| :--- |
| Service Availability Charge by meter size (c): |
| By meter size: |

$5 / 8^{\prime \prime}$
$3 / 4^{\prime \prime}$
$1 "$
(a) Base was defined as $90 \%$ of the previous average annual usage.
(b) Base is defined as $100 \%$ of the previous average annual usage.
(c) Per 100 gallons. Includes the first 1,496 gallons.

San Antonio Water System
Schedule 12 - Wholesale Class Rates

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Water |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $6{ }^{\prime \prime}$ | \$ | 489.24 | \$ | 450.50 | \$ | 397.62 | \$ | 383.80 | \$ | 374.62 | \$ | 374.62 | \$ | 362.30 | \$ | 362.30 | \$ | 257.24 | \$ | 249.26 |
| $8{ }^{\prime \prime}$ | \$ | 781.36 | \$ | 719.48 | \$ | 635.03 | \$ | 612.96 | \$ | 598.30 | \$ | 598.30 | \$ | 578.63 | \$ | 578.63 | \$ | 409.45 | \$ | 396.75 |
| $10^{\prime \prime}$ | \$ | 1,122.14 | \$ | 1,033.28 | \$ | 911.98 | \$ | 880.29 | \$ | 859.24 | \$ | 859.24 | \$ | 830.99 | \$ | 830.99 | \$ | 587.03 | \$ | 568.83 |
| 12 " | \$ | 2,095.85 | \$ | 1,929.88 | \$ | 1,703.33 | \$ | 1,644.14 | \$ | 1,604.82 | \$ | 1,604.82 | \$ | 1,552.05 | \$ | 1,552.05 | \$ | 1,094.42 | \$ | 1,060.48 |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Base (a) | \$ | 0.1906 | \$ | 0.1755 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Over Base | \$ | 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 |  |  |  |  |
| Below base (b) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1025 | \$ | 0.0993 |
| 100-125\% of base |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1279 | \$ | 0.1239 |
| 125-150\% of base |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1760 | \$ | 0.1705 |
| 150-200\% of base |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.2346 | \$ | 0.2273 |
| Over 200\% of base |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.3075 | \$ | 0.2980 |
| Sewer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge | \$ | 303.94 | \$ | 287.82 | \$ | 149.02 | \$ | 140.06 | \$ | 134.93 | \$ | 115.82 | \$ | 101.95 | \$ | 101.95 | \$ | 91.11 | \$ | 86.50 |
| Usage (per 100 gallons) | \$ | 0.3966 | \$ | 0.3756 | \$ | 0.3641 | \$ | 0.3422 | \$ | 0.3297 | \$ | 0.2830 | \$ | 0.2491 | \$ | 0.2491 | \$ | 0.2226 | \$ | 0.2113 |

(a) 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 SAWS Board of Trustees.
(b) Base was defined as $90 \%$ of the previous average annual usage.

San Antonio Water System
Schedule 13 - Irrigation Class Rates

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Inside City Limits |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8" | \$ | 12.58 | \$ | 11.58 | \$ | 10.53 | \$ | 10.16 | \$ | 9.92 | \$ | 9.92 | \$ | 9.59 | \$ | 9.59 | \$ | 9.81 | \$ | 9.51 |
| $3 / 4 "$ | \$ | 17.97 | \$ | 16.55 | \$ | 15.05 | \$ | 14.53 | \$ | 14.18 | \$ | 14.18 | \$ | 13.71 | \$ | 13.71 | \$ | 13.16 | \$ | 12.75 |
| $1{ }^{\prime \prime}$ | \$ | 28.74 | \$ | 26.46 | \$ | 24.08 | \$ | 23.24 | \$ | 22.68 | \$ | 22.68 | \$ | 21.93 | \$ | 21.93 | \$ | 19.21 | \$ | 18.61 |
| 1-1/2" | \$ | 55.65 | \$ | 51.24 | \$ | 46.65 | \$ | 45.03 | \$ | 43.95 | \$ | 43.95 | \$ | 42.50 | \$ | 42.50 | \$ | 35.03 | \$ | 33.94 |
| 2 " | \$ | 87.88 | \$ | 80.92 | \$ | 73.74 | \$ | 71.18 | \$ | 69.48 | \$ | 69.48 | \$ | 67.20 | \$ | 67.20 | \$ | 52.83 | \$ | 51.19 |
| $3 "$ | \$ | 163.19 | \$ | 150.27 | \$ | 136.96 | \$ | 132.20 | \$ | 129.04 | \$ | 129.04 | \$ | 124.80 | \$ | 124.80 | \$ | 106.92 | \$ | 103.60 |
| $4 "$ | \$ | 270.74 | \$ | 249.30 | \$ | 227.28 | \$ | 219.38 | \$ | 214.13 | \$ | 214.13 | \$ | 207.09 | S | 207.09 | \$ | 176.40 | \$ | 170.93 |
| $6 "$ | \$ | 539.61 | \$ | 496.88 | \$ | 453.06 | \$ | 437.32 | \$ | 426.86 | \$ | 426.86 | \$ | 412.82 | \$ | 412.82 | \$ | 350.03 | \$ | 339.18 |
| 8" | \$ | 862.31 | \$ | 794.02 | \$ | 723.99 | \$ | 698.83 | \$ | 682.12 | \$ | 682.12 | \$ | 659.69 | \$ | 659.69 | \$ | 543.20 | \$ | 526.36 |
| $10 "$ | \$ | 1,238.74 | \$ | 1,140.64 | \$ | 1,040.08 | \$ | 1,003.94 | \$ | 979.93 | \$ | 979.93 | \$ | 947.71 | S | 947.71 | \$ | 755.89 | \$ | 732.45 |
| 12 " | \$ | 2,314.31 | \$ | 2,131.04 | \$ | 1,943.21 | \$ | 1,875.69 | \$ | 1,830.83 | \$ | 1,830.83 | \$ | 1,770.63 | \$ | 1,770.63 | \$ | 1,191.85 | \$ | 1,154.89 |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 8,229 gallons | \$ | 0.2989 | \$ | 0.2752 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 9,725 gallons | \$ | 0.4183 | \$ | 0.3852 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 144,362 gallons | \$ | 0.5379 | \$ | 0.4953 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Over 162,316 gallons | \$ | 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 |  |  |  |  |


| First 12,717 gallons | $\$$ | 0.1526 | $\$$ |
| :--- | :--- | :--- | :--- |
| Next 4,488 gallons | 0.1479 |  |  |
| Over 17,205 gallons | 0.2290 | $\$$ | 0.2219 |


| Outside City Limits |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8" | \$ | 15.38 | \$ | 14.16 | \$ | 13.69 | \$ | 13.21 | \$ | 12.89 | \$ | 12.89 | \$ | 12.47 | \$ | 12.47 | \$ | 11.83 | \$ | 11.46 |
| $3 / 4 "$ | \$ | 21.90 | \$ | 20.17 | \$ | 19.56 | \$ | 18.88 | \$ | 18.43 | \$ | 18.43 | \$ | 17.82 | \$ | 17.82 | \$ | 15.72 | \$ | 15.23 |
| $1 "$ | \$ | 34.91 | \$ | 32.15 | \$ | 31.29 | \$ | 30.20 | \$ | 29.48 | \$ | 29.48 | \$ | 28.51 | \$ | 28.51 | \$ | 22.94 | \$ | 22.23 |
| 1-1/2" | \$ | 67.43 | \$ | 62.09 | \$ | 60.65 | \$ | 58.54 | \$ | 57.14 | \$ | 57.14 | \$ | 55.26 | \$ | 55.26 | \$ | 41.69 | \$ | 40.40 |
| 2 " | \$ | 106.41 | \$ | 97.98 | \$ | 95.87 | \$ | 92.54 | \$ | 90.33 | \$ | 90.33 | \$ | 87.36 | \$ | 87.36 | \$ | 63.01 | \$ | 61.06 |
| $3 "$ | \$ | 197.45 | \$ | 181.81 | \$ | 178.06 | \$ | 171.87 | \$ | 167.76 | \$ | 167.76 | \$ | 162.24 | \$ | 162.24 | \$ | 125.31 | \$ | 121.42 |
| $4 "$ | \$ | 327.45 | \$ | 301.52 | \$ | 295.46 | \$ | 285.19 | \$ | 278.37 | \$ | 278.37 | \$ | 269.22 | \$ | 269.22 | \$ | 206.48 | \$ | 200.08 |
| $6 "$ | \$ | 652.52 | \$ | 600.85 | \$ | 588.98 | \$ | 568.51 | \$ | 554.91 | \$ | 554.91 | \$ | 536.66 | \$ | 536.66 | \$ | 409.39 | \$ | 396.70 |
| $8{ }^{\prime \prime}$ | \$ | 1,042.61 | \$ | 960.05 | \$ | 941.20 | \$ | 908.49 | \$ | 886.76 | \$ | 886.76 | \$ | 857.60 | \$ | 857.60 | \$ | 637.69 | \$ | 617.92 |
| $10 "$ | \$ | 1,497.69 | \$ | 1,379.09 | \$ | 1,352.11 | \$ | 1,305.13 | \$ | 1,273.92 | \$ | 1,273.92 | \$ | 1,232.03 | \$ | 1,232.03 | \$ | 891.35 | \$ | 863.71 |
| 12 " | \$ | 2,797.97 | \$ | 2,576.40 | \$ | 2,526.17 | \$ | 2,438.39 | \$ | 2,380.08 | \$ | 2,380.08 | \$ | 2,301.82 | \$ | 2,301.82 | \$ | 1,444.41 | \$ | 1,399.62 |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 8,229 gallons | \$ | 0.3885 | \$ | 0.3577 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 9,725 gallons | \$ | 0.5439 | \$ | 0.5008 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 144,362 gallons | \$ | 0.6993 | \$ | 0.6439 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Over 162,316 gallons | \$ | 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 |  |  |  |  |
| First 12,717 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1982 | \$ | 0.1921 |
| Next 4,488 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.2976 | \$ | 0.2884 |
| Over 17,205 gallons |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.4109 | \$ | 0.3982 |

(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

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Water Supply Fee (a): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential Class |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 2,992 Gallons | \$ | 0.0954 | \$ | 0.0892 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,497 Gallons | \$ | 0.1669 | \$ | 0.1561 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,496 Gallons | \$ | 0.2145 | \$ | 0.2007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 1,496 Gallons | \$ | 0.2623 | \$ | 0.2454 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 2,992 Gallons | \$ | 0.3100 | \$ | 0.2900 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 4,489 Gallons | \$ | 0.3577 | \$ | 0.3346 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 5,237 Gallons | \$ | 0.4292 | \$ | 0.4015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Over 20,199 Gallons | \$ | 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 |  |  |  |  |
| All usage |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | \$ | 0.1529 | \$ | 0.1487 |
| General Class |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Base (b) | \$ | 0.1799 | \$ | 0.1683 | \$ | 0.1976 | \$ | 0.1880 | \$ | 0.1661 | S | 0.1620 | \$ | 0.1573 | \$ | 0.1573 | \$ | 0.1529 | \$ | 0.1487 |
| 100-125\% of base | \$ | 0.2070 | \$ | 0.1936 | \$ | 0.1976 | \$ | 0.1880 | \$ | 0.1661 | \$ | 0.1620 | \$ | 0.1573 | \$ | 0.1573 | \$ | 0.1529 | \$ | 0.1487 |
| 125-175\% of base | \$ | 0.2699 | \$ | 0.2525 | \$ | 0.1976 | \$ | 0.1880 | \$ | 0.1661 | \$ | 0.1620 | \$ | 0.1573 | \$ | 0.1573 | \$ | 0.1529 | \$ | 0.1487 |
| Over 175\% of base | \$ | 0.3149 | \$ | 0.2946 | \$ | 0.1976 | \$ | 0.1880 | \$ | 0.1661 | \$ | 0.1620 | \$ | 0.1573 | \$ | 0.1573 | \$ | 0.1529 | \$ | 0.1487 |
| Wholesale Class |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Base (c) | \$ | 0.2344 | \$ | 0.2193 | \$ | 0.1976 | \$ | 0.1880 | \$ | 0.1661 | \$ | 0.1620 | \$ | 0.1573 | \$ | 0.1573 | \$ | 0.1529 | \$ | 0.1487 |
| Over Base | \$ | 0.7033 | \$ | 0.6579 | \$ | 0.1976 | \$ | 0.1880 | \$ | 0.1661 | \$ | 0.1620 | \$ | 0.1573 | \$ | 0.1573 | \$ | 0.1529 | \$ | 0.1487 |
| Irrigation Class |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 8,229 gallons | \$ | 0.2354 | \$ | 0.2202 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 9,725 gallons | \$ | 0.3296 | \$ | 0.3083 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Next 144,362 gallons | \$ | 0.4238 | \$ | 0.3964 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Over 162,316 gallons | \$ | 0.5416 | \$ | 0.5066 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 6,732 gallons |  |  |  |  | \$ | 0.1976 | \$ | 0.1880 | \$ | 0.1661 | \$ | 0.1620 | \$ | 0.1573 | \$ | 0.1573 | \$ | 0.1529 | \$ | 0.1487 |
| Next 10,473 gallons |  |  |  |  | \$ | 0.2622 | \$ | 0.2495 | \$ | 0.2204 | \$ | 0.2150 | \$ | 0.2087 | \$ | 0.2087 | \$ | 0.1529 | \$ | 0.1487 |
| Over 17,205 gallons |  |  |  |  | \$ | 0.4976 | \$ | 0.4735 | \$ | 0.4183 | \$ | 0.4081 | \$ | 0.3962 | \$ | 0.3962 | \$ | 0.1529 | \$ | 0.1487 |
| EAA Fee (d) | \$ | 0.03612 | \$ | 0.04259 | \$ | 0.03311 | \$ | 0.03295 | \$ | 0.03425 | \$ | 0.03901 | \$ | 0.01407 | \$ | 0.01841 | \$ | 0.01222 | \$ | 0.01769 |
| State-Imposed TCEQ Fees (e) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Water Connection Fee | \$ | 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 | \$ | 0.05 | \$ | 0.05 |  |  |  |  |

(a) Applies to all billed potable water.
(b) Base is defined as $100 \%$ of the previous average annual usage.
(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 SAWS Board of Trustees.
(d) Per 100 gallons. Applies to all billed potable water. Purpose of fee is to recover fees paid to Edwards Aquifer Authority for permitted water rights. Annual rate takes into account any cumulative deficit or surplus in the recovery, number of EAA water rights, and projected potable water sales in gallons for the year.
(e) Purpose is to recover fees paid to Texas Commission on Environmental Quality (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.

Schedule 15 - Recycled Water Rates

|  | Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 |  | 2010 |  | 2009 |  | 2008 |  |
| Edwards Exchange Customers (a) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5/8" | \$ | 11.24 | \$ | 10.42 | \$ | 9.51 | \$ | 9.26 | \$ | 9.04 | \$ | 9.04 | \$ | 8.74 | \$ | 8.74 | \$ | 8.74 | \$ | 8.74 |
| 3/4" | \$ | 14.63 | \$ | 13.56 | \$ | 12.37 | \$ | 12.05 | \$ | 11.76 | \$ | 11.76 | \$ | 11.37 | \$ | 11.37 | \$ | 11.37 | \$ | 11.37 |
| $1{ }^{\prime \prime}$ | \$ | 19.06 | \$ | 17.66 | \$ | 16.11 | \$ | 15.69 | \$ | 15.31 | \$ | 15.31 | \$ | 14.81 | \$ | 14.81 | \$ | 14.81 | \$ | 14.81 |
| 1-1/2" | \$ | 30.29 | \$ | 28.07 | \$ | 25.61 | \$ | 24.95 | \$ | 24.35 | \$ | 24.35 | \$ | 23.55 | \$ | 23.55 | \$ | 23.55 | \$ | 23.55 |
| 2 " | \$ | 44.29 | \$ | 41.05 | \$ | 37.45 | \$ | 36.48 | \$ | 35.61 | \$ | 35.61 | \$ | 34.44 | \$ | 34.44 | \$ | 34.44 | \$ | 34.44 |
| $3 "$ | \$ | 117.79 | \$ | 109.17 | \$ | 99.61 | \$ | 97.03 | \$ | 94.71 | \$ | 94.71 | \$ | 91.60 | \$ | 91.60 | \$ | 91.60 | \$ | 91.60 |
| $4 "$ | \$ | 175.09 | \$ | 162.27 | \$ | 148.06 | \$ | 144.22 | \$ | 140.77 | \$ | 140.77 | \$ | 136.14 | \$ | 136.14 | \$ | 136.14 | \$ | 136.14 |
| $6 "$ | \$ | 334.00 | \$ | 309.55 | \$ | 282.44 | \$ | 275.12 | \$ | 268.54 | \$ | 268.54 | \$ | 259.71 | \$ | 259.71 | \$ | 259.71 | \$ | 259.71 |
| $8{ }^{\prime \prime}$ | \$ | 503.46 | \$ | 466.60 | \$ | 425.73 | \$ | 414.70 | \$ | 404.78 | \$ | 404.78 | \$ | 391.47 | \$ | 391.47 | \$ | 391.47 | \$ | 391.47 |
| 10 " | \$ | 690.35 | \$ | 639.81 | \$ | 583.77 | \$ | 568.64 | \$ | 555.04 | \$ | 555.04 | \$ | 536.79 | \$ | 536.79 | \$ | 536.79 | \$ | 536.79 |
| 12 " | \$ | 851.78 | \$ | 789.42 | \$ | 720.27 | \$ | 701.61 | \$ | 684.83 | \$ | 684.83 | \$ | 662.31 | \$ | 662.31 | \$ | 662.31 | \$ | 662.31 |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Standard: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Transferred amount | \$ | 0.0296 | \$ | 0.0274 | \$ | 0.0250 | \$ | 0.0244 | \$ | 0.0238 | \$ | 0.0238 | \$ | 0.0230 | \$ | 0.0230 | \$ | 0.0230 | \$ | 0.0230 |
| In excess of transferred amount | \$ | 0.1109 | \$ | 0.1028 | \$ | 0.0938 | \$ | 0.0914 | \$ | 0.0892 | \$ | 0.0892 | \$ | 0.0863 | \$ | 0.0863 | \$ | 0.0863 | \$ | 0.0863 |
| Seasonal (b): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Transferred amount | \$ | 0.0296 | \$ | 0.0274 | \$ | 0.0250 | \$ | 0.0244 | \$ | 0.0238 | \$ | 0.0238 | \$ | 0.0230 | \$ | 0.0230 | \$ | 0.0230 | \$ | 0.0230 |
| In excess of transferred amount | \$ | 0.1179 | \$ | 0.1093 | \$ | 0.0997 | \$ | 0.0971 | \$ | 0.0948 | \$ | 0.0948 | \$ | 0.0917 | \$ | 0.0917 | \$ | 0.0917 | \$ | 0.0917 |
| Non-exchange Customers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Service Availability Charge by meter size: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $5 / 8^{\prime \prime}$ | \$ | 11.24 | \$ | 10.42 | \$ | 9.51 | \$ | 9.26 | \$ | 9.04 | \$ | 9.04 | \$ | 8.74 | \$ | 8.74 | \$ | 8.74 | \$ | 8.74 |
| 3/4" | \$ | 14.63 | \$ | 13.56 | \$ | 12.37 | \$ | 12.05 | \$ | 11.76 | \$ | 11.76 | \$ | 11.37 | \$ | 11.37 | \$ | 11.37 | \$ | 11.37 |
| $1{ }^{\prime \prime}$ | \$ | 19.06 | \$ | 17.66 | \$ | 16.11 | \$ | 15.69 | \$ | 15.31 | \$ | 15.31 | \$ | 14.81 | \$ | 14.81 | \$ | 14.81 | \$ | 14.81 |
| 1-1/2" | \$ | 30.29 | \$ | 28.07 | \$ | 25.61 | \$ | 24.95 | \$ | 24.35 | \$ | 24.35 | \$ | 23.55 | \$ | 23.55 | \$ | 23.55 | \$ | 23.55 |
| $2{ }^{\prime \prime}$ | \$ | 44.29 | \$ | 41.05 | \$ | 37.45 | \$ | 36.48 | \$ | 35.61 | \$ | 35.61 | \$ | 34.44 | \$ | 34.44 | \$ | 34.44 | \$ | 34.44 |
| $3 "$ | \$ | 117.79 | \$ | 109.17 | \$ | 99.61 | \$ | 97.03 | \$ | 94.71 | \$ | 94.71 | \$ | 91.60 | \$ | 91.60 | \$ | 91.60 | \$ | 91.60 |
| $4 "$ | \$ | 175.09 | \$ | 162.27 | \$ | 148.06 | \$ | 144.22 | \$ | 140.77 | \$ | 140.77 | \$ | 136.14 | \$ | 136.14 | \$ | 136.14 | \$ | 136.14 |
| $6 "$ | \$ | 334.00 | \$ | 309.55 | \$ | 282.44 | \$ | 275.12 | \$ | 268.54 | \$ | 268.54 | \$ | 259.71 | \$ | 259.71 | \$ | 259.71 | \$ | 259.71 |
| $8{ }^{\prime \prime}$ | \$ | 503.46 | \$ | 466.60 | \$ | 425.73 | \$ | 414.70 | \$ | 404.78 | \$ | 404.78 | \$ | 391.47 | \$ | 391.47 | \$ | 391.47 | \$ | 391.47 |
| 10 " | \$ | 690.35 | \$ | 639.81 | \$ | 583.77 | \$ | 568.64 | \$ | 555.04 | \$ | 555.04 | \$ | 536.79 | \$ | 536.79 | \$ | 536.79 | \$ | 536.79 |
| 12 " | \$ | 851.78 | \$ | 789.42 | \$ | 720.27 | \$ | 701.61 | \$ | 684.83 | \$ | 684.83 | \$ | 662.31 | \$ | 662.31 | \$ | 662.31 | \$ | 662.31 |
| Usage (per 100 gallons) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Standard: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 748,000 gallons | \$ | $0.1187$ | \$ | $0.1100$ | \$ | $0.1004$ | \$ | $0.0978$ | \$ | 0.0955 | \$ | $0.0955$ | \$ | 0.0924 | \$ | 0.0924 | \$ | 0.0924 | \$ | 0.0924 |
| Over 748,000 gallons | \$ | 0.1213 | \$ | 0.1124 | \$ | 0.1026 | \$ | 0.0999 | \$ | 0.0975 | \$ | 0.0975 | \$ | 0.0943 | \$ | 0.0943 | \$ | 0.0943 | \$ | 0.0943 |
| Seasonal (b): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First 748,000 gallons | \$ | 0.1276 | \$ | 0.1183 | \$ | 0.1079 | \$ | 0.1051 | \$ | 0.1026 | \$ | 0.1026 | \$ | 0.0992 | \$ | 0.0992 | \$ | 0.0992 | \$ | 0.0992 |
| Over 748,000 gallons | \$ | 0.1288 | \$ | 0.1194 | \$ | 0.1089 | \$ | 0.1061 | \$ | 0.1036 | \$ | 0.1036 | \$ | 0.1002 | \$ | 0.1002 | \$ | 0.1002 | \$ | 0.1002 |

(a) Customers that have transferred Edwards Aquifer water rights to SAWS 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.

Water
Flow - All Areas
System Development:
Low Elevation Service Area Middle Elevation Service Area High Elevation Service Area

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |

$\left.\begin{array}{rrrrrrrrrrrrrrrr}\$ & 1,182.00 & \$ & 1,182.00 & \$ & 1,182.00 & \$ & 1,182.00 & \$ & 1,247.00 & \$ & 1,247.00 & \$ & 1,247.00 & \$ & 1,098.00\end{array}\right\}$

Wastewater
Treatment:
Dos Rios/Leon Creek Service Area
$\begin{array}{lrlrlrllllllll} & 786.00 & \$ & 786.00 & \$ & 786.00 & \$ & 786.00 & \$ & 552.00 & \$ & 552.00 & \$ & 552.00\end{array}$ Medio Creek
Upper and Lower Service Areas
Far West-Medio Service Areas
$\begin{array}{llllllllllll}\$ & 1,429.00 & \$ & 1,429.00 & \$ & 1,429.00 & \$ & 1,429.00 & \$ & 1,379.00 & \$ & 1,379.00\end{array} \$ 1,379.00$ $\begin{array}{llllll}\$ & 453.00 & \$ & 453.00 & \$ & 453.00 \\ \$ & 901.00 & \$ & 901.00 & \$ & 901.00\end{array}$

Collection:
$\begin{array}{llllllllllllllllll} \\ \text { Medio Creek } & \$ & 838.00 & \$ & 838.00 & \$ & 838.00 & \$ & 838.00 & \$ & 582.00 & \$ & 582.00 & \$ & 582.00\end{array}$

| Medio Creek | $\$$ | 838.00 | $\$$ | 838.00 | $\$$ | 838.00 | $\$$ | 838.00 | $\$$ | 582.00 | $\$$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Upper Medina | $\$$ | $1,565.00$ | $\$$ | $1,565.00$ | $\$$ | $1,565.00$ | $\$$ | $1,565.00$ | $\$$ | $1,053.00$ | $\$$ |

Lower Medina
Upper Collection
Middle Collection

|  | $\$ 1,469.00$ | $\$$ | $1,469.00$ | $\$$ | $1,469.00$ | $\$$ | $1,469.00$ | $\$$ | $1,142.00$ | $\$$ | $1,142.00$ | $\$$ |
| :--- | :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Lower Collection | $\$$ | $1,142.00$ |  |  |  |  |  |  |  |  |  |  |

$\begin{array}{lllllllllllllll}\text { Lower Collection } & \$ & 719.00 & \$ & 719.00 & \$ & 719.00 & \$ & 719.00 & \$ & 552.00 & \$ & 552.00 & \$ & 552.00\end{array}$
Lower Service Area
Upper Service Area
Far West-Medio Service Areas
Far West-Potranco, Big Sous, \& Lucas Service Area
Water Supply - All Areas (a)
$\begin{array}{lllllllllllllllllll}\$ & 2,796.00 & \$ & 2,796.00 & \$ & 2,796.00 & \$ & 1,590.00 & \$ & 1,297.00 & \$ & 1,297.00 & \$ & 1,297.00 & \$ & 1,242.00 & \$ & 1,242.00 & \$\end{array} 1,242.00$

Impact fees are assessed per equivalent dwelling unit.

| 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 |
| $1{ }^{\prime \prime}$ | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 1-1/2" | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| $2{ }^{\prime \prime}$ | 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 |
| $8{ }^{\prime \prime}$ | 135 | 135 | 135 | 135 | 135 | 135 | 135 | 135 | 135 | 135 |
| $10^{\prime \prime}$ | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| 12 " | 360 | 360 | 360 | 360 | 360 | 360 | 360 | 360 | 360 | 360 |

(a) 2015 rate effecive June 1, 2015

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

| Principal Business | Usage (a) <br> (million gallons) | \% | Total <br> Revenue (b) <br> (in thousands) |  | \% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Municipal Entity | 546 | 0.8\% | \$ | 3,534 | 0.9\% |
| Grocery | 602 | 0.9\% |  | 2,832 | 0.7\% |
| Public Housing | 448 | 0.7\% |  | 2,109 | 0.6\% |
| County Government | 415 | 0.6\% |  | 1,866 | 0.5\% |
| School System | 303 | 0.5\% |  | 1,775 | 0.5\% |
| University | 247 | 0.4\% |  | 1,699 | 0.4\% |
| School System | 250 | 0.4\% |  | 1,378 | 0.4\% |
| Hospital System | 234 | 0.4\% |  | 1,330 | 0.3\% |
| Hotels | 204 | 0.3\% |  | 1,263 | 0.3\% |
| Retail Water Utility | 252 | 0.4\% |  | 1,207 | 0.3\% |
|  | 3,501 | 5.3\% |  | 18,993 | 5.0\% |
|  | 62,140 | 94.7\% |  | 364,175 | 95.0\% |
|  | 65,641 | $\underline{\text { 100.0\% }}$ | \$ | 383,168 | $\underline{ }$ |

Fiscal Year Ended December 31, 2008:

| CITY OF SAN ANTONIO | Municipal Entity | 800 | 1.4\% | \$ | 3,251 | 1.5\% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAN ANTONIO HOUSING AUTHORITY | Public Housing | 558 | 0.9\% |  | 1,802 | 0.8\% |
| HEB GROCERY | Grocery | 461 | 0.8\% |  | 1,498 | 0.7\% |
| NORTHSIDE INDEPENDENT SCHOOL DISTRICT | School System | 353 | 0.6\% |  | 1,427 | 0.6\% |
| BEXAR COUNTY | County Government | 301 | 0.5\% |  | 920 | 0.4\% |
| CPS ENERGY | Public Power Utility | 295 | 0.5\% |  | 872 | 0.4\% |
| SAN ANTONIO INDEPENDENT SCHOOL DISTRICT | School System | 181 | 0.3\% |  | 778 | 0.3\% |
| NORTHEAST INDEPENDENT SCHOOL DISTRICT | School System | 187 | 0.3\% |  | 731 | 0.3\% |
| MAXIM INTEGRATED PRODUCT, INC. | Electronics | 259 | 0.4\% |  | 724 | 0.3\% |
| UNIVERSITY OF TEXAS AT SAN ANTONIO | University | 207 | 0.4\% |  | 639 | 0.3\% |
| Subtotal (10 largest) |  | 3,602 | 6.1\% |  | 12,642 | 5.7\% |
| Balance from Other Customers |  | 55,226 | 93.9\% |  | 209,963 | 94.3\% |
| Total |  | 58,828 | 100.0\% | \$ | 222,605 | 100.0\% |

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

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

| FRITO LAY, INC. ${ }^{\text {Customer }}$ | Principal Business | Usage (million gallons) | \% | Total <br> Revenue <br> (in thousands) |  | \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended December 31, 2017: |  |  |  |  |  |  |
| HEB GROCERY | Grocery | 517 | 1.1\% | \$ | 2,907 | 1.2\% |
| SAN ANTONIO HOUSING AUTHORITY | Public Housing | 447 | 0.9\% |  | 1,744 | 0.7\% |
| BEXAR COUNTY | County Government | 353 | 0.7\% |  | 1,430 | 0.6\% |
| CITY OF SAN ANTONIO | Municipal Entity | 218 | 0.4\% |  | 990 | 0.4\% |
| TOYOTA | Automobile Manufacturer | 233 | 0.5\% |  | 867 | 0.4\% |
| NORTHSIDE INDEPENDENT SCHOOL DISTRICT | School System | 183 | 0.4\% |  | 826 | 0.3\% |
| TOWERJAZZ TEXAS INC. | Electronics | 212 | 0.4\% |  | 791 | 0.3\% |
| FRITO LAY, INC. | Food Manufacturer | 62 | 0.1\% |  | 698 | 0.3\% |
| UNIVERSITY OF TEXAS AT SAN ANTONIO | University | 174 | 0.4\% |  | 658 | 0.3\% |
| MARRIOTT HOTELS | Hotels | 142 | 0.3\% |  | 599 | 0.3\% |
| Subtotal (10 largest) |  | 2,541 | 5.2\% |  | 11,510 | 4.8\% |
| Balance from Other Customers |  | 45,922 | 94.8\% |  | 226,062 | 95.2\% |
| Total |  | 48,463 | 100.0\% | \$ | 237,572 | 100.0\% |

Fiscal Year Ended December 31, 2008:
HEB GROCERY
SAN ANTONIO HOUSING AUTHORITY
BEXAR COUNTY
CITY OF SAN ANTONIO
MAXIM INTEGRATED PRODUCT INC.
OAK FARMS DAIRY
TOYOTA
L \& H PACKING COMPANY
AMERICAN OPPORTUNITY FOR HOUSING
FRITO LAY, INC.
Subtotal (10 largest)
Balance from Other Customers
Total

| Grocery | 382 | 0.8\% | \$ | 1,534 | 1.2\% |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Public Housing | 537 | 1.1\% |  | 1,056 | 0.8\% |
| County Government | 244 | 0.5\% |  | 543 | 0.4\% |
| Municipal Entity | 255 | 0.5\% |  | 529 | 0.4\% |
| Electronics | 229 | 0.5\% |  | 448 | 0.4\% |
| Dairy Producer | 65 | 0.1\% |  | 443 | 0.4\% |
| Vehicle Manufacturer | 179 | 0.4\% |  | 374 | 0.3\% |
| Beef Processor | 121 | 0.2\% |  | 369 | 0.3\% |
| Housing Services | 156 | 0.3\% |  | 305 | 0.2\% |
| Food Manufacturer | 56 | 0.1\% |  | 305 | 0.2\% |
|  | 2,224 | 4.4\% |  | 5,906 | 4.7\% |
|  | 48,123 | 95.6\% |  | 119,775 | 95.3\% |
|  | 50,347 | $\underline{ }$ | \$ | 125,681 | 100.0\% |

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

| Customer | Principal Business | Total <br> Revenue <br> (in thousands) |  | \% |
| :---: | :---: | :---: | :---: | :---: |
| Fiscal Year Ended December 31, 2017: |  |  |  |  |
| Lackland Air Force Base | Military | \$ | 2,505 | 25.2\% |
| Joint Base San Antonio - Ft. Sam Houston | Military |  | 1,848 | 18.6\% |
| Leon Valley | Municipal Government |  | 1,497 | 15.1\% |
| Alamo Heights | Municipal Government |  | 1,256 | 12.6\% |
| Bexar County Water Control District No. 10 | County Government |  | 712 | 7.2\% |
| Kirby | Municipal Government |  | 583 | 5.9\% |
| Balcones Heights | Municipal Government |  | 579 | 5.8\% |
| Olmos Park | Municipal Government |  | 428 | 4.3\% |
| Lackland Annex | Military |  | 259 | 2.6\% |
| Airforce Village | Residential Community |  | 108 | 1.1\% |
| Subtotal (10 largest) |  |  | 9,776 | 98.4\% |
| Balance from Other Customers |  |  | 159 | 1.6\% |
| Total |  | \$ | 9,936 | 100.0\% |

Fiscal Year Ended December 31, 2008:

Leon Valley
Alamo Heights
Lackland Air Force Base
Ft. Sam Houston
Bexar County Water Control District No. 10
Balcones Heights
Kirby
Terrell Hills
Olmos Park
Lackland Annex/Medina Base
Subtotal (10 largest)
Balance from Other Customers
Total

| Municipal Government | \$ | 948 | 18.0\% |
| :---: | :---: | :---: | :---: |
| Municipal Government |  | 845 | 16.0\% |
| Military |  | 726 | 13.7\% |
| Military |  | 622 | 11.8\% |
| County Government |  | 526 | 10.0\% |
| Municipal Government |  | 330 | 6.2\% |
| Municipal Government |  | 320 | 6.1\% |
| Municipal Government |  | 299 | 5.7\% |
| Municipal Government |  | 292 | 5.5\% |
| Military |  | 207 | 3.9\% |
|  |  | 5,115 | 96.9\% |
|  |  | 166 | 3.1\% |
|  | \$ | 5,281 | 100.0\% |

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

| Year | Total Debt Outstanding by Type |  |  |  |  |  |  |  |  |  |  |  |  | Debt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Revenue Bonds (b) |  |  |  | Commercial <br> Paper <br> Notes (a) |  | Other <br> Debt (b) | Total <br> Debt <br> Outstanding |  |  |  |  |  |  |  |
|  | Principal <br> Outstanding |  | nortized nium \& count | Net <br> Revenue Bonds <br> Payable |  |  | Gross <br> Revenues (c) |  |  | $\begin{gathered} \text { Total Debt } \\ \text { to Gross } \\ \text { Revenue } \\ \hline \end{gathered}$ | Customer <br> Connections (d) |  | mer <br> ction |  |  |
| 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 |
| 2009 | 1,759,700 |  | $(11,073)$ | 1,748,627 |  | 173,650 | - |  | 1,922,277 |  | 369,853 | 5.23 | 747,220 |  | 2,587 |
| 2008 | 1,427,525 |  | $(8,395)$ | 1,419,130 |  | 261,115 | 119 |  | 1,680,364 |  | 389,003 | 4.34 | 738,728 |  | 2,286 |

(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.

## San Antonio Water System

Schedule 21 - Pledged Revenue Coverage
(\$ in thousands)
Unaudited

| Year | Gross <br> Revenues (b) |  | Operating <br> Expenses (c) |  | Net <br> Available Revenue | Revenue Bond Debt Service (a) |  |  |  |  |  | Coverage | Maximum Annual Debt Service Requirements |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total Debt (e) |  |  |  |  |  |  |  |  | Coverage | Senior Lien |  | Coverage (f) |
|  |  |  | Principal | Interest (d) |  | Total |  |  | bt (e) |  |  |
| 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 |
| 2009 |  | 366,753 |  | 215,812 | 150,941 |  | 34,900 |  | 71,824 |  | 106,724 | 1.41 |  | 121,367 | 1.24 |  | 101,917 | 1.48 |
| 2008 |  | 384,228 |  | 205,486 | 178,742 |  | 27,630 |  | 67,810 |  | 95,440 | 1.87 |  | 98,840 | 1.81 |  | 86,140 | 2.08 |

(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 \& 2010B revenue bonds.
(e) Debt service requirements consist of principal and interest payments net of the U.S. federal interest subsidy on the Series 2009B \& 2010B revenue bonds.
(f) SAWS bond ordinance requires the maintenance of a debt coverage ratio of at least 1.25 x the maximum annual debt service on outstanding senior lien debt in order to issue additional bonds.

## San Antonio Water System

## Schedule 22 - Demographic and Economic Statistics

## Last Ten Calendar Years

Unaudited

| Year | Population (a) | Median <br> Age (a) |  | Personal <br> ncome (a) <br> thousands <br> of dollars) | Per Capita <br> Personal <br> Income (a) |  | School <br> Enrollment (a) | Building <br> Permits - <br> Dwelling <br> Units (b) | Employment (c) | Unemployment Rate (c) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | 1,517,866 | 33.5 | \$ | 36,308,882 | \$ | 23,921 | 401,867 | 12,509 | 1,136,835 | 3.0\% |
| 2016 | 1,469,824 | 33.1 |  | 34,905,380 |  | 23,748 | 403,558 | 12,241 | 1,109,096 | 3.6\% |
| 2015 | 1,436,697 | 33.2 |  | 32,790,329 |  | 22,823 | 401,771 | 7,824 | 1,077,724 | 3.5\% |
| 2014 | 1,416,291 | 33.0 |  | 31,581,326 |  | 22,414 | 407,047 | 10,334 | 1,046,337 | 3.7\% |
| 2013 | 1,383,194 | 33.2 |  | 30,752,552 |  | 22,233 | 397,500 | 6,129 | 1,021,672 | 4.9\% |
| 2012 | 1,359,730 | 32.7 |  | 29,038,394 |  | 21,356 | 396,718 | 8,005 | 1,000,015 | 5.7\% |
| 2011 | 1,326,539 | 32.8 |  | 28,421,098 |  | 21,425 | 392,897 | 7,127 | 976,361 | 6.4\% |
| 2010 | 1,319,492 | 32.1 |  | 28,260,879 |  | 21,418 | 387,343 | 6,865 | 951,369 | 7.0\% |
| 2009 | 1,340,549 | 32.6 |  | 28,750,754 |  | 21,447 | 296,328 | 5,924 | 907,040 | 6.9\% |
| 2008 | 1,328,984 | 32.8 |  | 27,653,499 |  | 20,808 | 295,673 | 10,574 | 899,596 | 5.2\% |

(a) Source: Information Technology 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: Texas Workforce Commission, San Antonio-New Braunfels Metropolitan Statistical Area, Total Employment and Unemployment rate

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

| Employer | 2017 |  |  | 2008 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employees | Rank | $\begin{gathered} \text { Percentage } \\ \text { of Total City } \\ \text { Employment }{ }^{1} \\ \hline \end{gathered}$ | Employees | Rank | $\begin{gathered} \text { Percentage } \\ \text { of Total City } \\ \text { Employment }{ }^{2} \\ \hline \end{gathered}$ |
| Joint Base San Antonio (JBSA) - Lackland, Fort Sam \& |  |  |  |  |  |  |
| Randolph ${ }^{3}$ | 75,972 | 1 | 7.46\% | 59,826 | 1,3,6 | 7.19\% |
| H.E.B. Food Stores | 22,000 | 2 | 2.16\% | 19,249 | 2 | 2.31\% |
| USAA | 17,163 | 3 | 1.69\% | 14,443 | 4 | 1.73\% |
| Northside Independent School District | 13,969 | 4 | 1.37\% | 12,810 | 5 | 1.54\% |
| City of San Antonio | 12,231 | 5 | 1.20\% | 9,830 | 7 | 1.18\% |
| North East Independent School District | 9,292 | 6 | 0.91\% | 8,360 | 8 | 1.00\% |
| Methodist Health Care System | 8,960 | 7 | 0.88\% | 7,496 | 10 | 0.90\% |
| San Antonio Independent School District | 7,374 | 8 | 0.72\% | 9,000 | 9 | 0.96\% |
| Baptist Health Systems | 6,432 | 9 | 0.63\% |  |  |  |
| Wells Fargo | 5,010 | 10 | 0.49\% |  |  |  |
| Total | $\underline{178,403}$ |  | 17.51\% | 141,014 |  | 16.81\% |

Source: Economic Development Division, City of San Antonio, Texas, Book of Lists 2017, and Department of Defense personnel statistics.
${ }^{1}$ Percent based on an Employment Estimate of 1,018,200 of Non-Farm jobs in the San Antonio-New Braunfels, TX Metropolitan Statistical Area as of January 2017. Figure provided by the Texas Workforce Commission.
${ }^{2}$ Percent based on an Employment Estimate of 832,800 of Non-Farm jobs in the San Antonio-New Braunfels, TX Metropolitan Statistical Area as of January 2008 Figure provided by the Texas Workforce Commission.
${ }^{3}$ In fiscal year 2012, Lackland, Fort Sam and Randolph military operations were consolidated into Joint Base San Antonio. In fiscal year 2008, the employee counts were $33,893,15,200$, and 10,733, respectively.

Table provided courtesy of City of San Antonio Finance Department

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

|  | Fiscal Yea |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 (a) | 2011 | 2010 | 2009 | 2008 |
| Functional Group |  |  |  |  |  |  |  |  |  |  |
| President/CEO | 8 | 7 | 10 | 13 | 14 | 16 | 11 | 12 | 13 | 12 |
| Production \& Treatment Operations | 299 | 302 | 138 | 131 | 292 | 363 | 353 | 358 | 368 | 341 |
| Distribution \& Collection Operations | 561 | 540 | 485 | 446 | 455 | 482 | 416 | 430 | 435 | 403 |
| Operation Services | 112 | 112 | 346 | 257 | 116 | 166 | 189 | 178 | 180 | 177 |
| Sewer System Improvements | 33 | 33 | 31 | 31 | 28 |  |  |  |  |  |
| Public Affairs | 51 | 24 | 28 | 26 | 24 | 32 | 32 | 32 | 32 | 19 |
| Customer Service | 231 | 229 | 233 | 235 | 229 | 222 | 215 | 206 | 210 | 212 |
| Engineering \& Construction | 177 | 166 | 191 | 221 | 202 | 225 | 201 | 189 | 201 | 193 |
| Water Resources | 19 | 40 | 42 | 138 | 158 | 62 | 62 | 54 | 63 | 55 |
| Financial Services | 64 | 65 | 67 | 62 | 64 | 52 | 67 | 69 | 58 | 56 |
| Information Services | 89 | 92 | 72 | 65 | 64 | 57 | 57 | 54 | 58 | 56 |
| Human Resources | 42 | 45 | 42 | 35 | 44 | 27 | 50 | 49 | 48 | 46 |
| Legal | 37 | 37 | 39 | 39 | 42 | 44 | 16 | 16 | 30 | 25 |
|  | 1,723 | 1,692 | 1,724 | 1,699 | 1,732 | 1,748 | 1,669 | 1,647 | 1,696 | 1,608 |

(a) In 2012 SAWS assumed operational control of the former Bexar Metropolitan Water District (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 mreger. The number of employees allocated to this special purpose entity during the years 2012, 2013 and 2014 were 70, 207 and 204, respectively.

## San Antonio Water System

Schedule 25 - Capital Assets
(amounts in thousands)

Water Delivery (a)
Water Supply:
Water Supply:
Water Resources
Recycle
Conservation
Stormwater

Wastewater
Chilled Water and Steam
Working Capital
Construction in Progress
Total assets before
accumulated depreciation
Accumulated Depreciation

| Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 |  | 2016 |  | 2015 |  | 2014 |  | 2013 |  | 2012 |  | 2011 | 2010 |  | 2009 |  | 2008 |  |
| \$ | 2,760,533 | \$ | 2,664,891 | \$ | 2,489,921 | \$ | 1,998,502 | \$ | 1,882,369 | \$ | 1,806,882 | \$ 1,680,136 | \$ | 1,621,171 | \$ | 1,548,754 | \$ | 1,472,040 |
|  | 1,047,530 |  | 1,036,861 |  | 740,434 |  | 708,825 |  | 628,445 |  | 585,055 | 556,979 |  | 546,491 |  | 429,129 |  | 353,988 |
|  | 181,281 |  | 178,219 |  | 177,487 |  | 159,171 |  | 159,059 |  | 155,556 | 152,993 |  | 151,640 |  | 151,184 |  | 149,308 |
|  | 561 |  | 559 |  | 558 |  | 511 |  | 465 |  | 436 | 444 |  | 441 |  | 335 |  | 221 |
|  | 314 |  | 321 |  | 354 |  | 302 |  | 277 |  | 211 | 179 |  | 187 |  | 183 |  | 161 |
|  | 2,796,525 |  | 2,702,938 |  | 2,551,584 |  | 2,390,077 |  | 2,202,056 |  | 1,968,415 | 1,858,386 |  | 1,761,832 |  | 1,704,933 |  | 1,639,280 |
|  | 61,280 |  | 62,800 |  | 61,162 |  | 51,117 |  | 56,929 |  | 53,011 | 52,948 |  | 52,957 |  | 52,007 |  | 50,303 |
|  | - |  | - |  | - |  | - |  | - |  | - | - |  | - |  | - |  | - |
|  | 332,635 |  | 228,595 |  | 485,962 |  | 368,688 |  | 506,829 |  | 571,547 | 522,438 |  | 415,810 |  | 427,971 |  | 372,607 |
|  | 7,180,659 |  | 6,875,184 |  | 6,507,462 |  | 5,677,193 |  | 5,436,429 |  | 5,141,113 | 4,824,503 |  | 4,550,529 |  | 4,314,496 |  | 4,037,908 |
|  | 2,128,882 |  | 1,989,093 |  | 1,859,676 |  | 1,587,715 |  | 1,472,429 |  | 1,369,885 | 1,271,438 |  | 1,187,662 |  | 1,140,232 |  | 1,070,718 |
| \$ | 5,051,777 | \$ | 4,886,091 | \$ | 4,647,786 | \$ | 4,089,478 | \$ | 3,964,000 | \$ | 3,771,228 | \$ 3,553,065 | \$ | 3,362,867 | \$ | 3,174,264 |  | 2,967,190 |

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

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


## San Antonio Water System

Schedule 26 - Operating and Capital Indicators - Water
Unaudited

Rainfall (Inches)
Customers/Connections (a)
Water Pumpage (Million Gallons)
Annual Water Pumped
ASR Recharge (b)
ASR Production (b)
Annual Pumped for Usage
Average Daily
Maximum Daily
Metered Usage (Million Gallons)

| Fiscal Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | 2016 | 2015 (f) | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| 27.33 | 43.92 | 44.22 | 27.63 | 32.00 | 39.40 | 17.58 | 37.39 | 30.69 | 13.76 |
| 496,543 | 488,705 | 482,821 | 373,920 | 367,408 | 365,099 | 360,281 | 356,546 | 352,059 | 348,834 |
| 89,843 | 88,016 | 83,138 | 69,834 | 69,020 | 70,338 | 74,627 | 69,591 | 68,191 | 71,785 |
| 11,198 | 11,159 | 6,911 | 1,569 | 2,629 | 3,742 | 3,928 | 8,320 | 5,542 | 3,535 |
| 462 | 697 | 1,903 | 6,374 | 4,793 | 1,446 | 4,309 | 556 | 472 | 407 |
| 78,645 | 76,857 | 76,227 | 68,265 | 66,391 | 66,596 | 70,699 | 61,272 | 62,649 | 68,250 |
| 245.6 | 240.5 | 227.8 | 191.3 | 189.1 | 192.2 | 204.5 | 190.7 | 186.8 | 194.9 |
| 302.8 | 359.9 | 335.0 | 261.0 | 270.2 | 264.0 | 265.6 | 314.0 | 273.8 | 299.0 |
| 65,641 | 63,934 | 62,896 | 57,261 | 55,108 | 55,320 | 59,133 | 52,578 | 55,295 | 58,828 |
| 92,632 | 93,289 | 94,144 | 83,126 | 82,902 | 84,822 | 84,640 | 85,035 | 81,923 | 71,738 |
| 24,634 | 27,710 | 23,233 | 12,931 | 11,476 | 7,431 | 6,098 | 6,132 | 6,256 | 6,256 |
| 50,165 | 39,429 | 28,967 | 23,959 | 28,764 | 30,928 | 28,632 | 29,013 | 21,249 | 16,179 |
| 167,431 | 160,428 | 146,344 | 121,086 | 122,484 | 123,080 | 119,393 | 120,077 | 109,320 | 94,766 |
| 191 | 191 | 182 | 147 | 149 | 143 | 139 | 144 | 140 | 136 |
| 117.1 | 119.9 | 119.9 | 101.8 | 91.3 | 81.2 | 81.2 | 73.9 | 66.5 | 65.2 |
| 277.2 | 269.2 | 261.7 | 220.6 | 197.4 | 183.7 | 184.1 | 180.8 | 166.2 | 165.0 |
| 7,060 | 6,961 | 6,831 | 5,259 | 5,072 | 5,022 | 4,988 | 4,936 | 4,866 | 4,802 |
| 1,843 | 1,194 | 2,363 | 2,018 | 1,863 | 2,128 | 3,397 | 1,475 | 3,212 | 2,594 |
| 40,872 | 39,988 | 38,460 | 28,753 | 28,323 | 27,914 | 27,566 | 27,115 | 26,599 | 25,955 |

(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 Edwards Aquifer Authority (EAA) as of December 31st. 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. 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.

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

| CITY | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arlington |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$24.20 | \$24.20 | \$22.40 | \$21.12 | \$19.49 | \$19.49 | \$19.49 | \$19.47 | \$18.99 | \$18.91 |
| 9000 Gallons | \$32.57 | \$32.57 | \$29.78 | \$27.96 | \$25.55 | \$25.55 | \$25.55 | \$25.53 | \$24.84 | \$24.70 |
| Austin |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$38.35 | \$38.35 | \$37.37 | \$37.21 | \$29.74 | \$26.16 | \$26.16 | \$20.34 | \$19.18 | \$17.93 |
| 9000 Gallons | \$70.30 | \$70.30 | \$66.88 | \$62.60 | \$51.74 | \$35.40 | \$35.40 | \$28.68 | \$27.04 | \$25.22 |
| Corpus Christi ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$42.37 | \$42.37 | \$34.76 | \$34.76 | \$32.25 | \$30.55 | \$28.97 | \$27.76 | \$25.54 | \$25.34 |
| 9000 Gallons | \$66.29 | \$66.29 | \$55.78 | \$55.78 | \$51.79 | \$48.76 | \$45.67 | \$43.30 | \$39.10 | \$38.62 |
| Dallas |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$21.69 | \$21.35 | \$20.86 | \$19.87 | \$19.39 | \$18.58 | \$17.62 | \$16.72 | \$16.16 | \$15.50 |
| 9000 Gallons | \$34.71 | \$34.10 | \$33.25 | \$31.60 | \$30.70 | \$29.23 | \$27.67 | \$26.17 | \$25.16 | \$23.90 |
| El Paso ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$25.23 | \$23.82 | \$21.62 | \$17.84 | \$17.84 | \$17.01 | \$16.53 | \$16.53 | \$16.53 | \$16.53 |
| 9000 Gallons | \$37.40 | \$31.28 | \$28.42 | \$24.10 | \$24.10 | \$22.99 | \$22.34 | \$22.34 | \$22.34 | \$22.34 |
| Ft. Worth |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$29.39 | \$28.60 | \$26.62 | \$24.82 | \$23.32 | \$23.32 | \$22.33 | \$22.25 | \$21.75 | \$20.45 |
| 9000 Gallons | \$41.14 | \$40.77 | \$38.49 | \$36.05 | \$34.55 | \$34.55 | \$33.08 | \$32.92 | \$32.42 | \$30.52 |
| Houston |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$33.52 | \$32.42 | \$31.97 | \$30.62 | \$30.26 | \$27.78 | \$25.51 | \$23.65 | \$21.91 | \$20.85 |
| 9000 Gallons | \$49.03 | \$47.42 | \$46.76 | \$44.78 | \$44.27 | \$40.62 | \$37.30 | \$34.60 | \$30.67 | \$29.19 |
| Lubbock |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$44.56 | \$44.56 | \$45.18 | \$43.86 | \$45.00 | \$45.00 | \$40.02 | \$40.02 | \$34.02 | \$23.41 |
| 9000 Gallons | \$58.84 | \$58.84 | \$63.72 | \$56.79 | \$57.00 | \$57.00 | \$48.03 | \$48.03 | \$43.99 | \$30.67 |
| Plano |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$29.48 | \$25.98 | \$25.98 | \$25.41 | \$23.10 | \$22.55 | \$20.50 | \$20.50 | \$19.35 | \$16.71 |
| 9000 Gallons | \$40.07 | \$35.28 | \$35.28 | \$33.72 | \$30.66 | \$29.18 | \$26.53 | \$26.53 | \$25.05 | \$21.63 |
| San Antonio (Standard) ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$28.65 | \$27.09 | \$23.50 | \$22.65 | \$21.54 | \$21.67 | \$19.59 | \$19.85 | \$22.11 | \$21.81 |
| 9000 Gallons | \$44.37 | \$41.96 | \$34.43 | \$33.16 | \$31.37 | \$31.53 | \$28.44 | \$28.83 | \$30.40 | \$30.03 |

[^0]San Antonio Water System
Map 2 - Map of Wastewater Service Area


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

Customers/Connections (a)
Effluent Volumes For Major Facilitie

## (million gallons per day)

Dos Rios

## Permit Flow

Average Annual Flow Maximum Monthly Average Flow
Leon Creek
Permit Flow
Average Annual Flow (two outfalls)
Maximum Monthly Average Flow (two outfalls)
Medio Creek

## Permit Flow

Average Annual Flow
Maximum Monthly Average Flow
Total

## Permit Flow

Average Annual Flow
Maximum Monthly Average Flow
Amount Treated Annually (millions of gallons)
Amount Treated Peak Day (millions of gallons)
Miles of Sewer Main In Place
Number of Manholes in Place
Number of Lift Stations
(a) Number of customers at end of calendar year.

| Fiscal Year |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| 445,023 | 437,460 | 429,609 | 424,257 | 416,801 | 412,275 | 405,119 | 400,096 | 395,161 | 389,894 |
| 125.00 | 125.00 | 125.00 | 125.00 | 125.00 | 125.00 | 125.00 | 125.00 | 125.00 | 125.00 |
| 94.46 | 98.26 | 93.84 | 85.20 | 78.47 | 79.04 | 74.97 | 86.47 | 74.37 | 76.53 |
| 106.44 | 117.01 | 112.44 | 91.19 | 86.78 | 87.01 | 76.63 | 103.66 | 89.36 | 81.43 |
| 46.00 | 46.00 | 46.00 | 46.00 | 46.00 | 46.00 | 46.00 | 46.00 | 46.00 | 46.00 |
| 35.52 | 38.59 | 35.04 | 28.98 | 37.68 | 38.62 | 35.07 | 38.83 | 34.99 | 34.71 |
| 38.61 | 45.06 | 44.26 | 39.03 | 44.16 | 43.77 | 36.46 | 45.30 | 64.74 | 38.62 |
| 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 | 16.00 |
| 6.43 | 7.73 | 6.92 | 7.08 | 7.76 | 7.29 | 6.83 | 7.53 | 6.32 | 5.87 |
| 7.08 | 9.73 | 8.24 | 7.49 | 8.45 | 8.14 | 6.97 | 8.71 | 7.45 | 6.57 |
| 187.00 | 187.00 | 187.00 | 187.00 | 187.00 | 187.00 | 187.00 | 187.00 | 187.00 | 187.00 |
| 136.41 | 144.58 | 135.79 | 121.26 | 124.26 | 124.95 | 116.87 | 132.83 | 115.68 | 117.11 |
| 152.13 | 171.80 | 162.54 | 137.71 | 139.40 | 138.92 | 120.06 | 157.67 | 161.55 | 126.62 |
| 50,945 | 49,282 | 48,563 | 50,689 | 50,076 | 49,055 | 49,918 | 48,151 | 51,987 | 50,347 |
| 245 | 311 | 286 | 196 | 221 | 199 | 160 | 258 | 194 | 174 |
| 5,482 | 5,375 | 5,322 | 5,247 | 5,238 | 5,200 | 5,163 | 5,118 | 5,085 | 5,001 |
| 107,247 | 105,346 | 103,874 | 100,017 | 99,037 | 98,136 | 97,280 | 96,200 | 95,541 | 94,027 |
| 151 | 155 | 153 | 156 | 155 | 159 | 159 | 158 | 164 | 162 |

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

| CITY | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 | 2010 | 2009 | 2008 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arlington |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$34.98 | \$31.56 | \$31.10 | \$30.26 | \$28.03 | \$28.03 | \$27.37 | \$26.89 | \$25.97 | \$25.29 |
| 9000 Gallons | \$47.52 | \$42.69 | \$42.20 | \$41.24 | \$38.02 | \$38.02 | \$37.03 | \$36.31 | \$35.03 | \$34.05 |
| Austin |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$62.30 | \$62.30 | \$59.86 | \$55.84 | \$54.40 | \$54.30 | \$50.35 | \$48.77 | \$46.28 | \$44.34 |
| 9000 Gallons | \$93.35 | \$93.95 | \$89.68 | \$83.23 | \$81.22 | \$81.06 | \$75.49 | \$73.22 | \$69.47 | \$66.66 |
| Corpus Christi |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$60.79 | \$60.79 | \$52.23 | \$52.23 | \$46.96 | \$43.21 | \$43.21 | \$40.80 | \$35.95 | \$34.15 |
| 9000 Gallons | \$80.86 | \$80.86 | \$69.48 | \$69.48 | \$62.71 | \$57.69 | \$57.69 | \$54.47 | \$48.01 | \$45.60 |
| Dallas |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$37.06 | \$36.56 | \$35.78 | \$34.15 | \$33.80 | \$33.00 | \$31.70 | \$29.99 | \$29.33 | \$28.63 |
| 9000 Gallons | \$53.20 | \$52.49 | \$51.38 | \$49.00 | \$48.50 | \$47.40 | \$45.50 | \$43.01 | \$42.11 | \$41.20 |
| El Paso |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$21.14 | \$19.73 | \$17.79 | \$16.48 | \$16.48 | \$15.68 | \$15.22 | \$15.22 | \$15.22 | \$15.22 |
| 9000 Gallons | \$28.23 | \$26.35 | \$23.77 | \$22.01 | \$22.01 | \$20.93 | \$20.31 | \$20.31 | \$20.31 | \$20.31 |
| Ft. Worth |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$35.53 | \$34.49 | \$30.60 | \$27.96 | \$27.96 | \$26.84 | \$26.27 | \$26.27 | \$25.67 | \$25.67 |
| 9000 Gallons | \$50.05 | \$48.49 | \$43.16 | \$39.39 | \$39.39 | \$37.70 | \$36.86 | \$36.86 | \$36.26 | \$36.26 |
| Houston |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$41.23 | \$39.87 | \$39.31 | \$37.65 | \$37.20 | \$34.15 | \$31.38 | \$29.09 | \$24.84 | \$22.67 |
| 9000 Gallons | \$65.68 | \$63.51 | \$62.62 | \$59.97 | \$59.25 | \$54.40 | \$49.98 | \$46.34 | \$36.69 | \$33.95 |
| Lubbock |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$35.02 | \$35.02 | \$28.70 | \$27.50 | \$27.50 | \$27.50 | \$24.30 | \$24.30 | \$22.10 | \$15.97 |
| 9000 Gallons | \$44.53 | \$44.53 | \$36.05 | \$34.25 | \$34.25 | \$34.25 | \$30.45 | \$30.45 | \$28.25 | \$21.46 |
| Plano |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$41.57 | \$39.23 | \$37.40 | \$34.40 | \$33.54 | \$33.54 | \$33.54 | \$33.54 | \$33.54 | \$27.95 |
| 9000 Gallons | \$58.13 | \$54.86 | \$52.31 | \$47.51 | \$46.32 | \$46.32 | \$46.32 | \$46.32 | \$46.32 | \$38.60 |
| San Antonio |  |  |  |  |  |  |  |  |  |  |
| 6000 Gallons | \$29.71 | \$28.13 | \$27.91 | \$26.24 | \$25.26 | \$21.70 | \$19.12 | \$19.10 | \$17.02 | \$16.17 |
| 9000 Gallons | \$42.20 | \$39.96 | \$38.00 | \$35.73 | \$34.40 | \$29.54 | \$26.02 | \$26.00 | \$23.20 | \$22.03 |

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

## BONDED DEBT SCHEDULES AND ANALYSES

San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEBT

For the Year Ended December 31, 2017 (amounts in thousands)


Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

## San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEBI

For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM REVENUE REFUNDING BONDS <br> Water System Revenue and Refunding Bonds, Series 2009 Paying Agent: Wells Fargo Bonds Dated: 01-15-09 | Original Issue |  | $\begin{array}{c}\text { Call } \\ \text { Options }\end{array}$ <br> NONE | Bond <br> Numbers |  | $\begin{gathered} \begin{array}{c} \text { Bond } \\ \text { Type } \end{array} \\ \hline \text { Serial } \end{gathered}$ | $\frac{\begin{array}{c} \text { Interest } \\ \text { Rates } \end{array}}{3.000 \%}$ | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  | Balances Outstanding <br> December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Issued |  |  | Retired |  |  |  |  |  |  |  |
|  | \$ | 3,865 |  | 1 | 773 |  |  | 15-May | 2009 | \$ | - | \$ | - | \$ |  | \$ | - |
|  |  | 2,635 |  | NONE | 774 |  | 1300 | Serial | 3.000 |  | 2010 |  | - |  | - |  | - |  | - |
|  |  | 2,715 | NONE | 1301 | 1843 | Serial | 3.000 |  | 2011 |  | - |  | - |  | - |  | - |
|  |  | 2,800 | NONE | 1844 | 2403 | Serial | 3.000 |  | 2012 |  | - |  | - |  | - |  | - |
|  |  | 2,885 | NONE | 2404 | 2980 | Serial | 3.000 |  | 2013 |  | - |  | - |  | - |  | - |
|  |  | 2,970 | NONE | 2981 | 3574 | Serial | 3.000 |  | 2014 |  | - |  | - |  | - |  | - |
|  |  | 3,060 | NONE | 3575 | 4186 | Serial | 3.000 |  | 2015 |  | - |  | - |  | - |  | - |
|  |  | 3,170 | NONE | 4187 | 4820 | Serial | 4.000 |  | 2016 |  | - |  | - |  | - |  | - |
|  |  | 3,315 | NONE | 4821 | 5483 | Serial | 5.000 |  | 2017 |  | 3,315 |  | - |  | 3,315 |  | - |
|  |  | 1,930 | NONE | 5484 | 5869 | Serial | 5.000 |  | 2018 |  | 1,930 |  | - |  | - |  | 1,930 |
|  |  | 1,550 | NONE | 5870 | 6179 | Serial | 4.000 |  | 2018 |  | 1,550 |  | - |  | - |  | 1,550 |
|  |  | 3,095 | (2) | 6180 | 6798 | Serial | 5.000 |  | 2019 |  | - |  | - |  | - |  | - |
|  |  | 550 | (2) | 6799 | 6908 | Serial | 4.000 |  | 2019 |  | - |  | - |  | - |  | - |
|  |  | 3,430 | (2) | 6909 | 7594 | Serial | 5.000 |  | 2020 |  | - |  | - |  | - |  | - |
|  |  | 400 | (2) | 7595 | 7674 | Serial | 4.000 |  | 2020 |  | - |  | - |  | - |  | - |
|  |  | 4,025 | (2) | 7675 | 8479 | Serial | 5.000 |  | 2021 |  | - |  | - |  | - |  | - |
|  |  | 3,525 | (2) | 8480 | 9184 | Serial | 5.000 |  | 2022 |  | - |  | - |  | - |  | - |
|  |  | 700 | (2) | 9185 | 9324 | Serial | 4.000 |  | 2022 |  | - |  | - |  | - |  | - |
|  |  | 3,080 | (2) | 9325 | 9940 | Serial | 5.000 |  | 2023 |  | - |  | - |  | - |  | - |
|  |  | 1,355 | (2) | 9941 | 10211 | Serial | 4.200 |  | 2023 |  | - |  | - |  | - |  | - |
|  |  | 2,935 | (2) | 10212 | 10798 | Serial | 5.000 |  | 2024 |  | - |  | - |  | - |  | - |
|  |  | 1,715 | (2) | 10799 | 11141 | Serial | 4.300 |  | 2024 |  | - |  | - |  | - |  | - |
|  |  | 400 | (2) | 11142 | 11221 | Serial | 4.500 |  | 2025 |  | - |  | - |  | - |  | - |
|  |  | 4,485 | (2)(36) | 11222 | 12118 | Term | 5.125 |  | 2025 |  | - |  | - |  | - |  | - |
|  |  | 5,140 | (2)(36) | 12119 | 13146 | Term | 5.125 |  | 2026 |  | - |  | - |  | - |  | - |
|  |  | 5,410 | (2)(36) | 13147 | 14228 | Term | 5.125 |  | 2027 |  | - |  | - |  | - |  | - |
|  |  | 2,995 | (2) | 14229 | 14827 | Serial | 5.000 |  | 2028 |  | - |  | - |  | - |  | - |
|  |  | 2,695 | (2)(36) | 14828 | 15366 | Term | 5.125 |  | 2028 |  | - |  | - |  | - |  | - |
|  |  | 1,665 | (2) | 15367 | 15699 | Serial | 5.000 |  | 2029 |  | - |  | - |  | - |  | - |
|  |  | 4,325 | (2)(36) | 15700 | 16564 | Term | 5.125 |  | 2029 |  | - |  | - |  | - |  | - |
|  |  | 6,305 | (2)(36) | 16565 | 17825 | Term | 5.250 |  | 2030 |  | - |  | - |  | - |  | - |
|  |  | 6,645 | (2)(36) | 17826 | 19154 | Term | 5.250 |  | 2031 |  | - |  | - |  | - |  | - |
|  |  | 7,005 | (2)(36) | 19155 | 20555 | Term | 5.250 |  | 2032 |  | - |  | - |  | - |  | - |
|  |  | 7,385 | (2)(36) | 20556 | 22032 | Term | 5.250 |  | 2033 |  | - |  | - |  | - |  | - |
|  |  | 7,780 | (2)(36) | 22033 | 23588 | Term | 5.250 |  | 2034 |  | - |  | - |  | - |  | - |
|  |  | 8,205 | (2)(36) | 23589 | 25229 | Term | 5.375 |  | 2035 |  | - |  | - |  | - |  | - |
|  |  | 8,660 | (2)(36) | 25230 | 26961 | Term | 5.375 |  | 2036 |  | - |  | - |  | - |  | - |
|  |  | 9,135 | (2)(36) | 26962 | 28788 | Term | 5.375 |  | 2037 |  | - |  | - |  | - |  | - |
|  |  | 9,640 | (2)(36) | 28789 | 30716 | Term | 5.375 |  | 2038 |  | - |  | - |  | - |  | - |
|  |  | 10,175 | (2)(36) | 30717 | 32751 | Term | 5.375 |  | 2039 |  | - |  | - |  | - |  | - |
|  | \$ | $\underline{163,755}$ |  |  |  |  |  |  |  | \$ | 6,795 | \$ | - | \$ | 3,315 | \$ | 3,480 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options

San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEB'

For the Year Ended December 31, 2017

## (amounts in thousands)



Note: See Analysis of Changes in Bonded Debt for further explanation of call options

San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEBT

For the Year Ended December 31, 2017

## (amounts in thousands)



Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEBT

For the Year Ended December 31, 2017

## (amounts in thousands)

WATER SYSTEM
REVENUE BONDS
Water System Revenue
Refunding Bonds, Series 2011
Paying Agent: USBank
Bonds Dated: 04-27-11

|  | $\begin{gathered} \text { Original } \\ \text { Issue } \\ \hline \end{gathered}$ | Call | Bond <br> Numbers |  | $\begin{gathered} \text { Bond } \\ \text { Type } \\ \hline \end{gathered}$ | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Options |  |  | Rates |  |  |  | Issued |  | Retired |  |  |
| \$ | - |  |  |  |  |  | - \% | 15-May |  |  | 2011 | \$ | - | \$ | - | \$ | - | \$ | - |
|  | 1,670 | NONE | 1 | 334 | Serial | 3.000 |  | 2012 |  | - |  | - |  | - |  | - |
|  | 1,960 | NONE | 335 | 726 | Serial | 3.000 |  | 2013 |  | - |  | - |  | - |  | - |
|  | 2,060 | NONE | 727 | 1138 | Serial | 4.000 |  | 2014 |  | - |  | - |  | - |  | - |
|  | 2,205 | NONE | 1139 | 1579 | Serial | 5.000 |  | 2015 |  | - |  | - |  | - |  | - |
|  | 2,340 | NONE | 1580 | 2047 | Serial | 4.000 |  | 2016 |  | - |  | - |  | - |  | - |
|  | 2,675 | NONE | 2048 | 2582 | Serial | 5.000 |  | 2017 |  | 2,675 |  | - |  | 2,675 |  | - |
|  | 2,855 | NONE | 2583 | 3153 | Serial | 5.000 |  | 2018 |  | 2,855 |  | - |  | - |  | 2,855 |
|  | 1,350 | NONE | 3154 | 3423 | Serial | 3.000 |  | 2019 |  | 1,350 |  | - |  | - |  | 1,350 |
|  | 1,585 | NONE | 3424 | 3740 | Serial | 5.000 |  | 2019 |  | 1,585 |  | - |  | - |  | 1,585 |
|  | 3,295 | NONE | 3741 | 4399 | Serial | 5.000 |  | 2020 |  | 3,295 |  | - |  | - |  | 3,295 |
|  | 3,505 | NONE | 4400 | 5100 | Serial | 5.000 |  | 2021 |  | 3,505 |  | - |  | - |  | 3,505 |
|  | 3,720 | (5) | 5101 | 5844 | Serial | 5.000 |  | 2022 |  | 3,720 |  | - |  | - |  | 3,720 |
|  | 3,950 | (5) | 5845 | 6634 | Serial | 5.000 |  | 2023 |  | 3,950 |  | - |  | - |  | 3,950 |
|  | 4,195 | (5) | 6635 | 7473 | Serial | 5.000 |  | 2024 |  | 4,195 |  | - |  | - |  | 4,195 |
|  | 4,455 | (5) | 7474 | 8364 | Serial | 5.000 |  | 2025 |  | 4,455 |  | - |  | - |  | 4,455 |
|  | 4,735 | (5) | 8365 | 9311 | Serial | 5.000 |  | 2026 |  | 4,735 |  | - |  | $-$ |  | 4,735 |
| \$ | 46,555 |  |  |  |  |  |  |  | \$ | 36,320 | \$ | - | \$ | 2,675 | \$ | 33,645 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

## San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEBT

For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM REVENUE BONDS | Original Issue |  | Call | Bond <br> Numbers |  | Bond Type | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  | Balances Outstanding December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Options |  |  | Rates |  |  |  | ired |  |  |
| Water System Revenue | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2011 | \$ | - |  | - |  | - |
| Refunding Bonds, Series 2011A |  | 665 | NONE | 1 | 133 | Serial | 2.000 |  | 2012 |  | - | - | - |  | - |
| Paying Agent: USBank |  | 5,400 | NONE | 134 | 1213 | Serial | 3.000 |  | 2013 |  | - |  | - |  | - |
| Bonds Dated: 10-06-11 |  | 1,385 | NONE | 1214 | 1490 | Serial | 2.000 |  | 2014 |  | - | - | - |  | - |
|  |  | 1,420 | NONE | 1491 | 1774 | Serial | 3.000 |  | 2015 |  | - | - | - |  | - |
|  |  | 1,460 | NONE | 1775 | 2066 | Serial | 3.000 |  | 2016 |  | - | - | - |  | - |
|  |  | 2,060 | NONE | 2067 | 2478 | Serial | 5.000 |  | 2017 |  | 2,060 | - | 2,060 |  | - |
|  |  | 1,600 | NONE | 2479 | 2798 | Serial | 5.000 |  | 2018 |  | 1,600 | - | - |  | 1,600 |
|  |  | 550 | NONE | 2799 | 2908 | Serial | 3.000 |  | 2018 |  | 550 | - | - |  | 550 |
|  |  | 3,985 | NONE | 2909 | 3705 | Serial | 4.000 |  | 2019 |  | 3,985 | - | - |  | 3,985 |
|  |  | 1,695 | NONE | 3706 | 4044 | Serial | 5.000 |  | 2020 |  | 1,695 | - | - |  | 1,695 |
|  |  | 3,705 | NONE | 4045 | 4785 | Serial | 4.000 |  | 2020 |  | 3,705 | - | - |  | 3,705 |
|  |  | 5,575 | (6) | 4786 | 5900 | Serial | 5.000 |  | 2021 |  | 5,575 | - | - |  | 5,575 |
|  |  | 1,000 | (6) | 5901 | 6100 | Serial | 3.250 |  | 2021 |  | 1,000 | - | - |  | 1,000 |
|  |  | 6,730 | (6) | 6101 | 7446 | Serial | 5.000 |  | 2022 |  | 6,730 | - | - |  | 6,730 |
|  |  | 7,890 | (6) | 7447 | 9024 | Serial | 5.000 |  | 2023 |  | 7,890 | - | - |  | 7,890 |
|  |  | 8,490 | (6) | 9025 | 10722 | Serial | 5.000 |  | 2024 |  | 8,490 | - | - |  | 8,490 |
|  |  | 8,930 | (6) | 10723 | 12508 | Serial | 5.000 |  | 2025 |  | 8,930 | - | - |  | 8,930 |
|  |  | 9,370 | (6) | 12509 | 14382 | Serial | 5.000 |  | 2026 |  | 9,370 | - | - |  | 9,370 |
|  |  | 5,585 | (6) | 14383 | 15499 | Serial | 5.000 |  | 2027 |  | 5,585 | - | - |  | 5,585 |
|  |  | 7,000 | (6) | 15500 | 16899 | Serial | 4.500 |  | 2027 |  | 7,000 | - | - |  | 7,000 |
|  |  | 14,445 | (6) | 16900 | 19788 | Serial | 5.000 |  | 2028 |  | 14,445 | - | - |  | 14,445 |
|  |  | 8,990 | (6) | 19789 | 21586 | Serial | 5.000 |  | 2029 |  | 8,990 | - | - |  | 8,990 |
|  |  | 9,450 | (6) | 21587 | 23476 | Serial | 5.000 |  | 2030 |  | 9,450 | - | - |  | 9,450 |
|  |  | 9,935 | (6) | 23477 | 25463 | Serial | 5.000 |  | 2031 |  | 9,935 | - | - |  | 9,935 |
|  |  | 10,445 | (6) | 25464 | 27552 | Serial | 5.000 |  | 2032 |  | 10,445 | - | - |  | 10,445 |
|  |  | 2,465 | (6)(39) | 27553 | 28045 | Term | 5.000 |  | 2033 |  | 2,465 | - | - |  | 2,465 |
|  |  | 2,590 | (6)(39) | 28046 | 28563 | Term | 5.000 |  | 2034 |  | 2,590 | - | - |  | 2,590 |
|  |  | 2,725 | (6)(39) | 28564 | 29108 | Term | 5.000 |  | 2035 |  | 2,725 | - | - |  | 2,725 |
|  |  | 2,865 | (6)(39) | 29109 | 29681 | Term | 5.000 |  | 2036 |  | 2,865 | - | - |  | 2,865 |
|  |  | 3,010 | (6)(39) | 29682 | 30283 | Term | 5.000 |  | 2037 |  | 3,010 | - | - |  | 3,010 |
|  |  | 3,165 | (6)(39) | 30284 | 30916 | Term | 5.000 |  | 2038 |  | 3,165 | - | - |  | 3,165 |
|  |  | 3,330 | (6)(39) | 30917 | 31582 | Term | 5.000 |  | 2039 |  | 3,330 | - | - |  | 3,330 |
|  |  | 3,500 | (6)(39) | 31583 | 32282 | Term | 5.000 |  | 2040 |  | 3,500 | - | - |  | 3,500 |
|  |  | 3,680 | (6)(39) | 32283 | 33018 | Term | 5.000 |  | 2041 |  | 3,680 | - | - |  | 3,680 |
|  | \$ | 165,090 |  |  |  |  |  |  |  | \$ | 154,760 | - | 2,060 |  | 152,700 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options

San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEBT

For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | OriginalIssue |  | Call | Bond <br> Numbers |  | Bond <br> Type | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances <br> Outstanding <br> December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Rates |  |  |  | Issued |  | Retired |  |  |
| Water System Revenue | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2012 | \$ | - | \$ | - | \$ | - | \$ | - |
| Refunding Bonds, Series 2012 |  | 2,610 | NONE | 1 | 522 | Serial | 2.000 |  | 2013 |  | - |  | - |  | - |  | - |
| Paying Agent: USBank |  | 2,650 | NONE | 523 | 1052 | Serial | 3.000 |  | 2014 |  | - |  | - |  | - |  | - |
| Bonds Dated: 02-29-12 |  | 2,720 | NONE | 1053 | 1596 | Serial | 4.000 |  | 2015 |  | - |  | - |  | - |  | - |
|  |  | 2,795 | NONE | 1597 | 2155 | Serial | 4.000 |  | 2016 |  | - |  | - |  | - |  | - |
|  |  | 7,085 | NONE | 2156 | 3572 | Serial | 5.000 |  | 2017 |  | 7,085 |  | - |  | 7,085 |  | - |
|  |  | 7,360 | NONE | 3573 | 5044 | Serial | 4.000 |  | 2018 |  | 7,360 |  | - |  | - |  | 7,360 |
|  |  | 4,345 | NONE | 5045 | 5913 | Serial | 4.000 |  | 2019 |  | 4,345 |  | - |  | - |  | 4,345 |
|  |  | 12,910 | NONE | 5914 | 8495 | Serial | 5.000 |  | 2020 |  | 12,910 |  | - |  | - |  | 12,910 |
|  |  | 13,510 | NONE | 8496 | 11197 | Serial | 5.000 |  | 2021 |  | 13,510 |  | - |  | - |  | 13,510 |
|  |  | 16,050 | NONE | 11198 | 14407 | Serial | 5.000 |  | 2022 |  | 16,050 |  | - |  | - |  | 16,050 |
|  |  | 16,840 | (7) | 14408 | 17775 | Serial | 5.000 |  | 2023 |  | 16,840 |  | - |  | - |  | 16,840 |
|  |  | 17,675 | (7) | 17776 | 21310 | Serial | 5.000 |  | 2024 |  | 17,675 |  | - |  | - |  | 17,675 |
|  |  | 18,540 | (7) | 21311 | 25018 | Serial | 5.000 |  | 2025 |  | 18,540 |  | - |  | - |  | 18,540 |
|  |  | 19,450 | (7) | 25019 | 28908 | Serial | 5.000 |  | 2026 |  | 19,450 |  | - |  | - |  | 19,450 |
|  |  | 39,450 | (7) | 28909 | 36798 | Serial | 5.000 |  | 2027 |  | 39,450 |  | - |  | - |  | 39,450 |
|  |  | 41,265 | (7) | 36799 | 45051 | Serial | 4.000 |  | 2028 |  | 41,265 |  | - |  | $-$ |  | 41,265 |
|  | \$ | $\underline{\text { 225,255 }}$ |  |  |  |  |  |  |  | \$ | 214,480 | \$ | - | \$ | 7,085 | \$ | 207,395 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call | Bond <br> Numbers |  | Bond Type | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Rates |  |  |  |  | Retired |  |  |
| Water System Revenue | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2012 | \$ | - | - |  | - |  | - |
| Refunding Bonds, Series 2012A |  | 1,705 | NONE | 1 | 341 | Serial | 2.000 |  | 2013 |  | - |  |  | - |  | - |
| Paying Agent: USBank |  | 2,655 | NONE | 342 | 872 | Serial | 3.000 |  | 2014 |  | - |  |  | - |  | - |
| Bonds Dated: 10-02-12 |  | 2,750 | NONE | 873 | 1422 | Serial | 2.000 |  | 2015 |  | - | - |  | - |  | - |
|  |  | 2,880 | NONE | 1423 | 1998 | Serial | 3.000 |  | 2016 |  | - | - |  | - |  | - |
|  |  | 3,025 | NONE | 1999 | 2603 | Serial | 3.000 |  | 2017 |  | 3,025 |  |  | 3,025 |  | - |
|  |  | 3,180 | NONE | 2604 | 3239 | Serial | 5.000 |  | 2018 |  | 3,180 | - |  | - |  | 3,180 |
|  |  | 3,345 | NONE | 3240 | 3908 | Serial | 5.000 |  | 2019 |  | 3,345 | - |  | - |  | 3,345 |
|  |  | 3,500 | NONE | 3909 | 4608 | Serial | 3.000 |  | 2020 |  | 3,500 | - |  | - |  | 3,500 |
|  |  | 3,660 | NONE | 4609 | 5340 | Serial | 4.000 |  | 2021 |  | 3,660 |  |  | - |  | 3,660 |
|  |  | 3,850 | NONE | 5341 | 6110 | Serial | 5.000 |  | 2022 |  | 3,850 | - |  | - |  | 3,850 |
|  |  | 4,045 | (8) | 6111 | 6919 | Serial | 4.000 |  | 2023 |  | 4,045 | - |  | - |  | 4,045 |
|  |  | 4,255 | (8) | 6920 | 7770 | Serial | 5.000 |  | 2024 |  | 4,255 | - |  | - |  | 4,255 |
|  |  | 4,470 | (8) | 7771 | 8664 | Serial | 3.250 |  | 2025 |  | 4,470 | - |  | - |  | 4,470 |
|  |  | 4,700 | (8) | 8665 | 9604 | Serial | 5.000 |  | 2026 |  | 4,700 | - |  | - |  | 4,700 |
|  |  | 4,940 | (8) | 9605 | 10592 | Serial | 5.000 |  | 2027 |  | 4,940 | - |  | - |  | 4,940 |
|  |  | 5,195 | (8) | 10593 | 11631 | Serial | 5.000 |  | 2028 |  | 5,195 | - |  | - |  | 5,195 |
|  |  | 5,460 | (8) | 11632 | 12723 | Serial | 5.000 |  | 2029 |  | 5,460 | - |  | - |  | 5,460 |
|  |  | 5,740 | (8) | 12724 | 13871 | Serial | 5.000 |  | 2030 |  | 5,740 | - |  | - |  | 5,740 |
|  |  | 6,035 | (8) | 13872 | 15078 | Serial | 5.000 |  | 2031 |  | 6,035 | - |  | - |  | 6,035 |
|  |  | 6,310 | (8)(40) | 15079 | 16340 | Term | 5.000 |  | 2032 |  | 6,310 | - |  | - |  | 6,310 |
|  |  | 6,570 | (8)(40) | 16341 | 17654 | Term | 5.000 |  | 2033 |  | 6,570 | - |  | - |  | 6,570 |
|  |  | 6,840 | (8)(40) | 17655 | 19022 | Term | 5.000 |  | 2034 |  | 6,840 | - |  | - |  | 6,840 |
|  |  | 7,155 | (8) | 19023 | 20453 | Serial | 5.000 |  | 2035 |  | 7,155 | - |  | - |  | 7,155 |
|  |  | 7,520 | (8) | 20454 | 21957 | Serial | 5.000 |  | 2036 |  | 7,520 | - |  | - |  | 7,520 |
|  |  | 4,140 | (8) | 21958 | 22785 | Serial | 5.000 |  | 2037 |  | 4,140 | - |  | - |  | 4,140 |
|  |  | 3,765 | (8)(40) | 22786 | 23538 | Term | 5.000 |  | 2037 |  | 3,765 | - |  | - |  | 3,765 |
|  |  | 8,310 | (8)(40) | 23539 | 25200 | Term | 5.000 |  | 2038 |  | 8,310 | - |  | - |  | 8,310 |
|  |  | 8,740 | (8)(40) | 25201 | 26948 | Term | 5.000 |  | 2039 |  | 8,740 | - |  | - |  | 8,740 |
|  |  | 9,185 | (8)(40) | 26949 | 28785 | Term | 5.000 |  | 2040 |  | 9,185 | - |  | - |  | 9,185 |
|  |  | 9,585 | (8)(40) | 28786 | 30702 | Term | 5.000 |  | 2041 |  | 9,585 | - |  | - |  | 9,585 |
|  |  | 9,925 | (8)(40) | 30703 | 32687 | Term | 5.000 |  | 2042 |  | 9,925 | - |  | - |  | 9,925 |
|  | \$ | $\underline{163,435}$ |  |  |  |  |  |  |  | \$ | 153,445 | - | \$ | 3,025 |  | 150,420 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEBT

For the Year Ended December 31, 2017
(amounts in thousands)


[^1]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)


[^2]San Antonio Water System

## ANALYSIS OF CHANGES IN BONDED DEBT

For the Year Ended December 31, 2017 (amounts in thousands)


[^3]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017 (amounts in thousands)


[^4]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)


Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017 (amounts in thousands)

| WATER SYSTEM | OriginalIssue |  | Call | Bond <br> Numbers |  | Bond | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Type | Rates |  |  |  | Issued |  | Retired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | 15-May | 2009 |  |  | \$ | - | \$ |  | \$ | - | \$ |  |
| Revenue and Refunding |  | - |  |  |  |  | - |  | 2010 |  | - |  | - |  | - |  | - |
| Bonds, Series 2009A |  | - |  |  |  |  | - |  | 2011 |  | - |  | - |  | - |  | - |
| Paying Agent: Wells Fargo |  | - |  |  |  |  | - |  | 2012 |  | - |  | - |  | - |  | - |
| Bonds Dated: 11-01-09 |  | - |  |  |  |  | - |  | 2013 |  | - |  | - |  | - |  | - |
|  |  | - |  |  |  |  | - |  | 2014 |  | - |  | - |  | - |  | - |
|  |  | - |  |  |  |  | - |  | 2015 |  | - |  | - |  | - |  | - |
|  |  | 2,240 | NONE | 1 | 448 | Serial | 0.644 |  | 2016 |  | - |  | - |  | - |  | - |
|  |  | 2,255 | NONE | 449 | 899 | Serial | 0.854 |  | 2017 |  | 2,255 |  | - |  | 2,255 |  | - |
|  |  | 2,275 | NONE | 900 | 1354 | Serial | 1.064 |  | 2018 |  | 2,275 |  | - |  | - |  | 2,275 |
|  |  | 2,305 | NONE | 1355 | 1815 | Serial | 1.372 |  | 2019 |  | 2,305 |  | - |  | - |  | 2,305 |
|  |  | 2,340 | (14) | 1816 | 2283 | Serial | 1.642 |  | 2020 |  | 2,340 |  | - |  | - |  | 2,340 |
|  |  | 2,385 | (14) | 2284 | 2760 | Serial | 1.947 |  | 2021 |  | 2,385 |  | - |  | - |  | 2,385 |
|  |  | 2,430 | (14) | 2761 | 3246 | Serial | 2.131 |  | 2022 |  | 2,430 |  | - |  | - |  | 2,430 |
|  |  | 2,485 | (14) | 3247 | 3743 | Serial | 2.280 |  | 2023 |  | 2,485 |  | - |  | - |  | 2,485 |
|  |  | 2,545 | (14) | 3744 | 4252 | Serial | 2.351 |  | 2024 |  | 2,545 |  | - | - | - |  | 2,545 |
|  |  | 2,605 | (14) | 4253 | 4773 | Serial | 2.532 |  | 2025 |  | 2,605 |  | - | - | - |  | 2,605 |
|  |  | 2,675 | (14) | 4774 | 5308 | Serial | 2.463 |  | 2026 |  | 2,675 |  | - | - | - |  | 2,675 |
|  |  | 2,745 | (14) | 5309 | 5857 | Serial | 2.706 |  | 2027 |  | 2,745 |  | - | - | - |  | 2,745 |
|  |  | 2,820 | (14) | 5858 | 6421 | Serial | 2.661 |  | 2028 |  | 2,820 |  | - | - | - |  | 2,820 |
|  |  | 2,895 | (14) | 6422 | 7000 | Serial | 2.815 |  | 2029 |  | 2,895 |  | - |  | - |  | 2,895 |
|  | \$ | 35,000 |  |  |  |  |  |  |  | \$ | 32,760 | \$ | - | - | 2,255 |  | 30,505 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017


[^5]
## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)


Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call <br> Options | Bond <br> Numbers |  | Bond | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Type |  |  | Rates |  |  |  | Issued |  | Retired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2011 | \$ | - | \$ |  | \$ | - | \$ |  |
| Revenue Bonds, |  | 1,120 | NONE | 1 | 224 | Serial | - |  | 2012 |  | - |  | - |  | - |  |  |
| Series 2011 |  | 1,175 | NONE | 225 | 459 | Serial | - |  | 2013 |  | - |  | - |  | - |  | - |
| Paying Agent: US Bank N.A. |  | 1,175 | NONE | 460 | 694 | Serial | - |  | 2014 |  | - |  | - |  | - |  | - |
| Bonds Dated: 08-18-11 |  | 1,175 | NONE | 695 | 929 | Serial | - |  | 2015 |  | - |  | - |  | - |  | - |
|  |  | 1,175 | NONE | 930 | 1164 | Serial | - |  | 2016 |  | - |  | - |  | - |  | - |
|  |  | 1,175 | NONE | 1165 | 1399 | Serial | - |  | 2017 |  | 1,175 |  | - |  | 1,175 |  | - |
|  |  | 1,175 | NONE | 1400 | 1634 | Serial | 0.060 |  | 2018 |  | 1,175 |  | - |  | - |  | 1,175 |
|  |  | 1,175 | NONE | 1635 | 1869 | Serial | 0.360 |  | 2019 |  | 1,175 |  | - |  | - |  | 1,175 |
|  |  | 1,180 | NONE | 1870 | 2105 | Serial | 0.590 |  | 2020 |  | 1,180 |  | - |  | - |  | 1,180 |
|  |  | 1,190 | NONE | 2106 | 2343 | Serial | 0.790 |  | 2021 |  | 1,190 |  | - |  | - |  | 1,190 |
|  |  | 1,200 | (16) | 2344 | 2583 | Serial | 0.980 |  | 2022 |  | 1,200 |  | - |  | - |  | 1,200 |
|  |  | 1,215 | (16) | 2584 | 2826 | Serial | 1.150 |  | 2023 |  | 1,215 |  | - |  | - |  | 1,215 |
|  |  | 1,230 | (16) | 2827 | 3072 | Serial | 1.320 |  | 2024 |  | 1,230 |  | - |  | - |  | 1,230 |
|  |  | 1,245 | (16) | 3073 | 3321 | Serial | 1.490 |  | 2025 |  | 1,245 |  | - |  | - |  | 1,245 |
|  |  | 1,265 | (16) | 3322 | 3574 | Serial | 1.620 |  | 2026 |  | 1,265 |  | - |  | - |  | 1,265 |
|  |  | 1,285 | (16) | 3575 | 3831 | Serial | 1.720 |  | 2027 |  | 1,285 |  | - |  | - |  | 1,285 |
|  |  | 1,310 | (16) | 3832 | 4093 | Serial | 1.820 |  | 2028 |  | 1,310 |  | - |  | - |  | 1,310 |
|  |  | 1,335 | (16) | 4094 | 4360 | Serial | 1.920 |  | 2029 |  | 1,335 |  | - |  | - |  | 1,335 |
|  |  | 1,360 | (16) | 4361 | 4632 | Serial | 2.070 |  | 2030 |  | 1,360 |  | - |  | - |  | 1,360 |
|  |  | 1,390 | (16) | 4633 | 4910 | Serial | 2.070 |  | 2031 |  | 1,390 |  | - |  | - |  | 1,390 |
|  | \$ | $\stackrel{\text { 24,550 }}{ }$ |  |  |  |  |  |  |  | \$ | $\xrightarrow{18,730}$ | \$ | - | \$ | 1,175 | \$ | $\xrightarrow{17,555}$ |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM | $\begin{gathered} \text { Original } \\ \text { Issue } \\ \hline \end{gathered}$ |  | Call | Bond <br> Numbers |  | $\begin{gathered} \text { Bond } \\ \text { Type } \\ \hline \end{gathered}$ | Interest Rates | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Issued |  |  |  | Retired |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2011 | \$ | - | \$ | - |  | - | - |
| Revenue and Refunding |  | 335 | NONE | 1 | 67 | Serial | - |  | 2012 |  | - |  | - |  | - | - |
| Bonds, Series 2011A |  | 455 | NONE | 68 | 158 | Serial | - |  | 2013 |  | - |  | - |  | - | - |
| Paying Agent: US Bank N.A. |  | 455 | NONE | 159 | 249 | Serial | - |  | 2014 |  | - |  | - |  | - | - |
| Bonds Dated: 08-18-11 |  | 455 | NONE | 250 | 340 | Serial | 0.350 |  | 2015 |  | - |  | - |  | - | - |
|  |  | 455 | NONE | 341 | 431 | Serial | 0.650 |  | 2016 |  | - |  | - |  | - | - |
|  |  | 460 | NONE | 432 | 523 | Serial | 0.950 |  | 2017 |  | 460 |  | - |  | 460 | - |
|  |  | 465 | NONE | 524 | 616 | Serial | 1.250 |  | 2018 |  | 465 |  | - |  | - | 465 |
|  |  | 475 | NONE | 617 | 711 | Serial | 1.550 |  | 2019 |  | 475 |  | - |  | - | 475 |
|  |  | 480 | NONE | 712 | 807 | Serial | 1.800 |  | 2020 |  | 480 |  | - |  | - | 480 |
|  |  | 490 | NONE | 808 | 905 | Serial | 2.000 |  | 2021 |  | 490 |  | - |  | - | 490 |
|  |  | 500 | (17) | 906 | 1005 | Serial | 2.200 |  | 2022 |  | 500 |  | - |  | - | 500 |
|  |  | 510 | (17) | 1006 | 1107 | Serial | 2.400 |  | 2023 |  | 510 |  | - |  | - | 510 |
|  |  | 525 | (17) | 1108 | 1212 | Serial | 2.550 |  | 2024 |  | 525 |  | - |  | - | 525 |
|  |  | 540 | (17) | 1213 | 1320 | Serial | 2.700 |  | 2025 |  | 540 |  | - |  | - | 540 |
|  |  | 555 | (17) | 1321 | 1431 | Serial | 2.850 |  | 2026 |  | 555 |  | - |  | - | 555 |
|  |  | 570 | (17) | 1432 | 1545 | Serial | 2.950 |  | 2027 |  | 570 |  | - |  | - | 570 |
|  |  | 590 | (17) | 1546 | 1663 | Serial | 3.050 |  | 2028 |  | 590 |  | - |  | - | 590 |
|  |  | 605 | (17) | 1664 | 1784 | Serial | 3.150 |  | 2029 |  | 605 |  | - |  | - | 605 |
|  |  | 625 | (17) | 1785 | 1909 | Serial | 3.250 |  | 2030 |  | 625 |  | - |  | - | 625 |
|  |  | 645 | (17) | 1910 | 2038 | Serial | 3.300 |  | 2031 |  | 645 |  | - |  | - | 645 |
|  |  | 670 | (17) | 2039 | 2172 | Serial | 3.400 |  | 2032 |  | 670 |  | - |  | - | 670 |
|  |  | 690 | (17) | 2173 | 2310 | Serial | 3.500 |  | 2033 |  | 690 |  | - |  | - | 690 |
|  |  | 715 | (17) | 2311 | 2453 | Serial | 3.550 |  | 2034 |  | 715 |  | - |  | - | 715 |
|  |  | 745 | (17) | 2454 | 2602 | Serial | 3.650 |  | 2035 |  | 745 |  | - |  | - | 745 |
|  |  | 770 | (17) | 2603 | 2756 | Serial | 3.700 |  | 2036 |  | 770 |  | - |  | - | 770 |
|  |  | 800 | (17) | 2757 | 2916 | Serial | 3.700 |  | 2037 |  | 800 |  | - |  | - | 800 |
|  |  | 830 | (17) | 2917 | 3082 | Serial | 3.700 |  | 2038 |  | 830 |  | - |  | - | 830 |
|  |  | 860 | (17) | 3083 | 3254 | Serial | 3.700 |  | 2039 |  | 860 |  | - |  | - | 860 |
|  |  | 895 | (17) | 3255 | 3433 | Serial | 3.700 |  | 2040 |  | 895 |  | - |  | - | 895 |
|  |  | 930 | (17) | 3434 | 3619 | Serial | 3.900 |  | 2041 |  | 930 |  | - |  | - | 930 |
|  | \$ | 18,095 |  |  |  |  |  |  |  | \$ | 15,940 | \$ | - | \$ | 460 | 15,480 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

| Bond | Interest Rates | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type |  |  |  |  | Issued |  | Retired |  |  |
|  | - \% | 15-May | 2012 |  |  | \$ |  | \$ | - | \$ | - | \$ | - |
| Serial | 2.000 |  | 2013 |  | - |  | - |  | - |  | - |
| Serial | 2.000 |  | 2014 |  | - |  | - |  | - |  | - |
| Serial | 4.000 |  | 2015 |  | - |  | - |  | - |  | - |
| Serial | 4.000 |  | 2016 |  | - |  | - |  | - |  | - |
| Serial | 4.000 |  | 2017 |  | 3,135 |  | - |  | 3,135 |  | - |
| Serial | 4.000 |  | 2018 |  | 3,290 |  | - |  | - |  | 3,290 |
| Serial | 4.000 |  | 2019 |  | 4,265 |  | - |  | - |  | 4,265 |
| Serial | 4.500 |  | 2020 |  | 3,545 |  | - |  | - |  | 3,545 |
| Serial | 4.500 |  | 2021 |  | 3,735 |  | - |  | - |  | 3,735 |
| Serial | 5.000 |  | 2022 |  | 1,795 |  | - |  | - |  | 1,795 |
|  |  |  |  | \$ | 19,765 | \$ | - | \$ | 3,135 | \$ | 16,630 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM | $\begin{aligned} & \text { Original } \\ & \text { Issue } \\ & \hline \end{aligned}$ |  | Call | Bond <br> Numbers |  | $\begin{gathered} \text { Bond } \\ \text { Type } \\ \hline \end{gathered}$ | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  | Balances <br> Outstanding <br> December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Rates |  |  |  |  |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2012 | \$ | - |  |  | - | - |
| Revenue Bonds, Series 2012 |  | 545 | NONE | 1 | 109 | Serial | - |  | 2013 |  | - |  |  | - | - |
| Paying Agent: US Bank N.A. |  | 590 | NONE | 110 | 227 | Serial | - |  | 2014 |  | - |  |  | - | - |
| Bonds Dated: 08-28-12 |  | 590 | NONE | 228 | 345 | Serial | - |  | 2015 |  | - |  |  | - | - |
|  |  | 590 | NONE | 346 | 463 | Serial | - |  | 2016 |  | - | - |  | - | - |
|  |  | 590 | NONE | 464 | 581 | Serial | - |  | 2017 |  | 590 | - |  | 590 | - |
|  |  | 590 | NONE | 582 | 699 | Serial | - |  | 2018 |  | 590 | - |  | - | 590 |
|  |  | 590 | NONE | 700 | 817 | Serial | 0.140 |  | 2019 |  | 590 | - |  | - | 590 |
|  |  | 595 | NONE | 818 | 936 | Serial | 0.389 |  | 2020 |  | 595 | - |  | - | 595 |
|  |  | 595 | NONE | 937 | 1055 | Serial | 0.580 |  | 2021 |  | 595 | - |  | - | 595 |
|  |  | 600 | NONE | 1056 | 1175 | Serial | 0.710 |  | 2022 |  | 600 | - |  | - | 600 |
|  |  | 605 | (18) | 1176 | 1296 | Serial | 0.830 |  | 2023 |  | 605 | - |  | - | 605 |
|  |  | 610 | (18) | 1297 | 1418 | Serial | 0.920 |  | 2024 |  | 610 | - |  | - | 610 |
|  |  | 615 | (18) | 1419 | 1541 | Serial | 1.010 |  | 2025 |  | 615 |  |  | - | 615 |
|  |  | 625 | (18) | 1542 | 1666 | Serial | 1.090 |  | 2026 |  | 625 | - |  | - | 625 |
|  |  | 630 | (18) | 1667 | 1792 | Serial | 1.160 |  | 2027 |  | 630 |  |  | - | 630 |
|  |  | 635 | (18) | 1793 | 1919 | Serial | 1.230 |  | 2028 |  | 635 | - |  | - | 635 |
|  |  | 645 | (18) | 1920 | 2048 | Serial | 1.300 |  | 2029 |  | 645 | - |  | - | 645 |
|  |  | 655 | (18) | 2049 | 2179 | Serial | 1.370 |  | 2030 |  | 655 | - |  | - | 655 |
|  |  | 665 | (18) | 2180 | 2312 | Serial | 1.430 |  | 2031 |  | 665 | - |  | - | 665 |
|  |  | 675 | (18) | 2313 | 2447 | Serial | 1.490 |  | 2032 |  | 675 | - |  | - | 675 |
|  |  | 685 | (18) | 2448 | 2584 | Serial | 1.550 |  | 2033 |  | 685 | - |  | - | 685 |
|  |  | 695 | (18) | 2585 | 2723 | Serial | 1.620 |  | 2034 |  | 695 | - |  | - | 695 |
|  |  | 705 | (18) | 2724 | 2864 | Serial | 1.690 |  | 2035 |  | 705 | - |  | - | 705 |
|  |  | 720 | (18) | 2865 | 3008 | Serial | 1.750 |  | 2036 |  | 720 | - |  | - | 720 |
|  |  | 730 | (18) | 3009 | 3154 | Serial | 1.790 |  | 2037 |  | 730 | - |  | - | 730 |
|  |  | 745 | (18) | 3155 | 3303 | Serial | 1.810 |  | 2038 |  | 745 | - |  | - | 745 |
|  |  | 760 | (18) | 3304 | 3455 | Serial | 1.820 |  | 2039 |  | 760 | - |  | - | 760 |
|  |  | 770 | (18) | 3456 | 3609 | Serial | 1.830 |  | 2040 |  | 770 | - |  | - | 770 |
|  |  | 785 | (18) | 3610 | 3766 | Serial | 1.840 |  | 2041 |  | 785 | - |  | - | 785 |
|  |  | 800 | (18) | 3767 | 3926 | Serial | 1.850 |  | 2042 |  | 800 | - |  | $-$ | 800 |
|  | \$ | $\underline{\text { 19,630 }}$ |  |  |  |  |  |  |  | \$ | $\underline{ }$ | - | \$ | 590 | 16,725 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM REVENUE BONDS | Original <br> Issue |  | Call | Bond <br> Numbers |  | $\begin{aligned} & \text { Bond } \\ & \text { Type } \\ & \hline \end{aligned}$ | Interest | Maturity Dates |  | BalancesOutstandingJanuary 1, 2017 |  | Transactions |  |  |  | Balances Outstanding December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Options |  |  | Rates |  |  |  |  |  | ired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2013 | \$ | - | \$ | - | \$ | - | \$ |  |
| Revenue Bonds, Series 2013A |  | 2,395 | NONE | 1 | 479 | Serial | 0.000 |  | 2014 |  | - |  | - |  | - |  | - |
| Paying Agent: Bank of New York |  | 2,390 | NONE | 480 | 957 | Serial | 0.000 |  | 2015 |  | - |  | - |  | - |  | - |
| Bonds Dated: 05-07-13 |  | 2,390 | NONE | 958 | 1435 | Serial | 0.000 |  | 2016 |  | - |  | - |  | - |  | - |
|  |  | 2,390 | NONE | 1436 | 1913 | Serial | 0.000 |  | 2017 |  | 2,390 |  | - |  | 2,390 |  | - |
|  |  | 2,390 | NONE | 1914 | 2391 | Serial | 0.000 |  | 2018 |  | 2,390 |  | - |  | - |  | 2,390 |
|  |  | 2,395 | NONE | 2392 | 2870 | Serial | 0.090 |  | 2019 |  | 2,395 |  | - |  | - |  | 2,395 |
|  |  | 2,400 | NONE | 2871 | 3350 | Serial | 0.300 |  | 2020 |  | 2,400 |  | - |  | - |  | 2,400 |
|  |  | 2,410 | NONE | 3351 | 3832 | Serial | 0.480 |  | 2021 |  | 2,410 |  | - |  | - |  | 2,410 |
|  |  | 2,420 | NONE | 3833 | 4316 | Serial | 0.670 |  | 2022 |  | 2,420 |  | - |  | - |  | 2,420 |
|  |  | 2,440 | NONE | 4317 | 4804 | Serial | 0.850 |  | 2023 |  | 2,440 |  | - |  | - |  | 2,440 |
|  |  | 2,460 | (19) | 4805 | 5296 | Serial | 0.940 |  | 2024 |  | 2,460 |  | - |  | - |  | 2,460 |
|  |  | 2,485 | (19) | 5297 | 5793 | Serial | 1.020 |  | 2025 |  | 2,485 |  | - |  | - |  | 2,485 |
|  |  | 2,515 | (19) | 5794 | 6296 | Serial | 1.090 |  | 2026 |  | 2,515 |  | - |  | - |  | 2,515 |
|  |  | 2,540 | (19) | 6297 | 6804 | Serial | 1.150 |  | 2027 |  | 2,540 |  | - |  | - |  | 2,540 |
|  |  | 2,570 | (19) | 6805 | 7318 | Serial | 1.220 |  | 2028 |  | 2,570 |  | - |  | - |  | 2,570 |
|  |  | 2,605 | (19) | 7319 | 7839 | Serial | 1.270 |  | 2029 |  | 2,605 |  | - |  | - |  | 2,605 |
|  |  | 2,635 | (19) | 7840 | 8366 | Serial | 1.330 |  | 2030 |  | 2,635 |  | - |  | - |  | 2,635 |
|  |  | 2,675 | (19) | 8367 | 8901 | Serial | 1.380 |  | 2031 |  | 2,675 |  | - |  | - |  | 2,675 |
|  |  | 2,720 | (19) | 8902 | 9445 | Serial | 2.050 |  | 2032 |  | 2,720 |  | - |  | - |  | 2,720 |
|  |  | 2,775 | (19) | 9446 | 10000 | Serial | 2.050 |  | 2033 |  | 2,775 |  | - |  | - |  | 2,775 |
|  | \$ | 50,000 |  |  |  |  |  |  |  | \$ | 42,825 | \$ | - | \$ | 2,390 | \$ | 40,435 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call | Bond <br> Numbers |  | BondType | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Rates |  |  |  | Issued |  | Retired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2013 | \$ | - | \$ | - | \$ | - | \$ | - |
| Revenue Refunding Bonds, |  | 1,875 | NONE | 1 | 375 | Serial | 2.000 |  | 2014 |  | - |  | - |  | - |  | - |
| Series 2013B (No Reserve Fund) |  | 3,715 | NONE | 376 | 1118 | Serial | 4.000 |  | 2015 |  | - |  | - |  | - |  | - |
| Paying Agent: US Bank |  | 3,870 | NONE | 1119 | 1892 | Serial | 4.000 |  | 2016 |  | - |  | - |  | - |  | - |
| Bonds Dated: 06-06-13 |  | 4,030 | NONE | 1893 | 2698 | Serial | 4.000 |  | 2017 |  | 4,030 |  | - |  | 4,030 |  | - |
|  |  | 4,200 | NONE | 2699 | 3538 | Serial | 5.000 |  | 2018 |  | 4,200 |  | - |  | - |  | 4,200 |
|  |  | 4,410 | NONE | 3539 | 4420 | Serial | 5.000 |  | 2019 |  | 4,410 |  | - |  | - |  | 4,410 |
|  |  | 4,640 | NONE | 4421 | 5348 | Serial | 5.000 |  | 2020 |  | 4,640 |  | - |  | - |  | 4,640 |
|  |  | 4,875 | NONE | 5349 | 6323 | Serial | 5.000 |  | 2021 |  | 4,875 |  | - |  | - |  | 4,875 |
|  |  | 5,125 | NONE | 6324 | 7348 | Serial | 5.000 |  | 2022 |  | 5,125 |  | - |  | - |  | 5,125 |
|  |  | 3,620 | NONE | 7349 | 8072 | Serial | 5.000 |  | 2023 |  | 3,620 |  | - |  | - |  | 3,620 |
|  |  | 2,970 | (20) | 8073 | 8666 | Serial | 5.000 |  | 2024 |  | 2,970 |  | - |  | - |  | 2,970 |
|  |  | 3,120 | (20) | 8667 | 9290 | Serial | 5.000 |  | 2025 |  | 3,120 |  | - |  | - |  | 3,120 |
|  |  | 3,285 | (20) | 9291 | 9947 | Serial | 5.000 |  | 2026 |  | 3,285 |  | - |  | - |  | 3,285 |
|  |  | 3,450 | (20) | 9948 | 10637 | Serial | 5.000 |  | 2027 |  | 3,450 |  | - |  | - |  | 3,450 |
|  |  | 3,630 | (20) | 10638 | 11363 | Serial | 5.000 |  | 2028 |  | 3,630 |  | - |  | - |  | 3,630 |
|  |  | 3,815 | (20) | 11364 | 12126 | Serial | 5.000 |  | 2029 |  | 3,815 |  | - |  | - |  | 3,815 |
|  |  | 4,015 | (20) | 12127 | 12929 | Serial | 5.000 |  | 2030 |  | 4,015 |  | - |  | - |  | 4,015 |
|  |  | 4,220 | (20) | 12930 | 13773 | Serial | 5.000 |  | 2031 |  | 4,220 |  | - |  | - |  | 4,220 |
|  |  | 4,440 | (20) | 13774 | 14661 | Serial | 5.000 |  | 2032 |  | 4,440 |  | - |  | - |  | 4,440 |
|  |  | 4,670 | (20) | 14662 | 15595 | Serial | 5.000 |  | 2033 |  | 4,670 |  | - |  | - |  | 4,670 |
|  |  | 4,910 | (20) | 15596 | 16577 | Serial | 5.000 |  | 2034 |  | 4,910 |  | - |  | - |  | 4,910 |
|  | \$ | $\xrightarrow{82,885}$ |  |  |  |  |  |  |  | \$ | 73,425 | \$ | - | \$ | 4,030 | \$ | 69,395 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | $\begin{gathered} \text { Original } \\ \text { Issue } \end{gathered}$ |  | Call | BondNumbers |  | $\begin{aligned} & \text { Bond } \\ & \text { Type } \\ & \hline \end{aligned}$ | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Rates |  |  |  | Issued |  | Retired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2013 | \$ | - | \$ | - | \$ | - | \$ | - |
| Revenue Bonds, Series 2013C |  | 1,230 | NONE | 1 | 246 | Serial | 0.000 |  | 2014 |  | - |  | - |  | - |  | - |
| Paying Agent: Bank of New York |  | 1,210 | NONE | 247 | 488 | Serial | 0.000 |  | 2015 |  | - |  | - |  | - |  | - |
| Bonds Dated: 12-05-13 |  | 1,210 | NONE | 489 | 730 | Serial | 0.000 |  | 2016 |  | - |  | - |  | - |  | - |
|  |  | 1,210 | NONE | 731 | 972 | Serial | 0.000 |  | 2017 |  | 1,210 |  | - |  | 1,210 |  | - |
|  |  | 1,210 | NONE | 973 | 1214 | Serial | 0.400 |  | 2018 |  | 1,210 |  | - |  | - |  | 1,210 |
|  |  | 1,210 | NONE | 1215 | 1456 | Serial | 0.420 |  | 2019 |  | 1,210 |  | - |  | - |  | 1,210 |
|  |  | 1,220 | NONE | 1457 | 1700 | Serial | 0.790 |  | 2020 |  | 1,220 |  | - |  | - |  | 1,220 |
|  |  | 1,230 | NONE | 1701 | 1946 | Serial | 1.110 |  | 2021 |  | 1,230 |  | - |  | - |  | 1,230 |
|  |  | 1,245 | NONE | 1947 | 2195 | Serial | 1.300 |  | 2022 |  | 1,245 |  | - |  | - |  | 1,245 |
|  |  | 1,260 | NONE | 2196 | 2447 | Serial | 1.480 |  | 2023 |  | 1,260 |  | - |  | - |  | 1,260 |
|  |  | 1,280 | (21) | 2448 | 2703 | Serial | 1.650 |  | 2024 |  | 1,280 |  | - |  | - |  | 1,280 |
|  |  | 1,305 | (21) | 2704 | 2964 | Serial | 1.810 |  | 2025 |  | 1,305 |  | - |  | - |  | 1,305 |
|  |  | 1,330 | (21) | 2965 | 3230 | Serial | 1.970 |  | 2026 |  | 1,330 |  | - |  | - |  | 1,330 |
|  |  | 1,355 | (21) | 3231 | 3501 | Serial | 2.120 |  | 2027 |  | 1,355 |  | - |  | - |  | 1,355 |
|  |  | 1,385 | (21) | 3502 | 3778 | Serial | 2.270 |  | 2028 |  | 1,385 |  | - |  | - |  | 1,385 |
|  |  | 1,420 | (21) | 3779 | 4062 | Serial | 2.390 |  | 2029 |  | 1,420 |  | - |  | - |  | 1,420 |
|  |  | 1,455 | (21) | 4063 | 4353 | Serial | 2.510 |  | 2030 |  | 1,455 |  | - |  | - |  | 1,455 |
|  |  | 1,495 | (21) | 4354 | 4652 | Serial | 2.590 |  | 2031 |  | 1,495 |  | - |  | - |  | 1,495 |
|  |  | 1,535 | (21) | 4653 | 4959 | Serial | 2.680 |  | 2032 |  | 1,535 |  | - |  | - |  | 1,535 |
|  |  | 1,575 | (21) | 4960 | 5274 | Serial | 2.740 |  | 2033 |  | 1,575 |  | - |  | - |  | 1,575 |
|  | \$ | 26,370 |  |  |  |  |  |  |  | \$ | 22,720 | \$ | - | \$ | 1,210 |  | 21,510 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)



[^6]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call | BondNumbers |  | $\begin{aligned} & \text { Bond } \\ & \text { Type } \\ & \hline \end{aligned}$ | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | BalancesOutstandingDecember 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Rates |  |  |  | Issued |  | Retired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | $2.000 \%$ | 15-May |  |  | 2013 | \$ | - |  |  | \$ | - | \$ | - |
| Revenue and Refunding Bonds, |  | 3,180 | NONE | 1 | 636 | Serial | 4.000 |  | 2014 |  | - |  | - |  | - |  | - |
| Series 2013E (No Reserve Fund) |  | 3,370 | NONE | 637 | 1310 | Serial | 4.000 |  | 2015 |  | - |  | - |  | - |  | - |
| Paying Agent: USBank |  | 3,505 | NONE | 1311 | 2011 | Serial | 5.000 |  | 2016 |  | - |  | - |  | - |  | - |
| Bonds Dated: 11-06-13 |  | 3,670 | NONE | 2012 | 2745 | Serial | 4.000 |  | 2017 |  | 3,670 |  | - |  | 3,670 |  | - |
|  |  | 3,840 | NONE | 2746 | 3513 | Serial | 5.000 |  | 2018 |  | 3,840 |  | - |  | - |  | 3,840 |
|  |  | 4,015 | NONE | 3514 | 4316 | Serial | 4.000 |  | 2019 |  | 4,015 |  | - |  | - |  | 4,015 |
|  |  | 4,200 | NONE | 4317 | 5156 | Serial | 5.000 |  | 2020 |  | 4,200 |  | - |  | - |  | 4,200 |
|  |  | 4,395 | NONE | 5157 | 6035 | Serial | 5.000 |  | 2021 |  | 4,395 |  | - |  | - |  | 4,395 |
|  |  | 4,620 | NONE | 6036 | 6959 | Serial | 5.000 |  | 2022 |  | 4,620 |  | - |  | - |  | 4,620 |
|  |  | 4,855 | NONE | 6960 | 7930 | Serial | 5.000 |  | 2023 |  | 4,855 |  | - |  | - |  | 4,855 |
|  |  | 5,105 | (23) | 7931 | 8951 | Serial | 5.000 |  | 2024 |  | 5,105 |  | - |  | - |  | 5,105 |
|  |  | 5,365 | (23) | 8952 | 10024 | Serial | 5.000 |  | 2025 |  | 5,365 |  | - |  | - |  | 5,365 |
|  |  | 5,640 | (23) | 10025 | 11152 | Serial | 5.000 |  | 2026 |  | 5,640 |  | - |  | - |  | 5,640 |
|  |  | 5,930 | (23) | 11153 | 12338 | Serial | 5.000 |  | 2027 |  | 5,930 |  | - |  | - |  | 5,930 |
|  |  | 6,235 | (23) | 12339 | 13585 | Serial | 5.000 |  | 2028 |  | 6,235 |  | - |  | - |  | 6,235 |
|  |  | 6,555 | (23) | 13586 | 14896 | Serial | 5.000 |  | 2029 |  | 6,555 |  | - |  | - |  | 6,555 |
|  |  | 4,870 | (23) | 14897 | 15870 | Serial | 4.000 |  | 2030 |  | 4,870 |  | - |  | - |  | 4,870 |
|  | \$ | 79,350 |  |  |  |  |  |  |  | \$ | 69,295 | \$ | - | \$ | 3,670 | \$ | 65,625 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | $\begin{gathered} \text { Original } \\ \text { Issue } \\ \hline \end{gathered}$ |  | Call | Bond <br> Numbers |  | Bond | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Type | Rates* |  |  |  | Issued |  | Retired |  |  |
| Water System Junior Lien | \$ | - | NONE |  |  |  |  | 1-May | 2013 |  |  | \$ | - | \$ |  | \$ | - |  | - |
| Revenue and Refunding Bonds, |  | - | NONE |  |  |  |  |  | 2014 |  | - |  | - |  | - |  | - |
| Series 2013F (No Reserve Fund) |  | - | NONE |  |  |  |  |  | 2015 |  | - |  |  |  | - |  | - |
| Paying Agent: USBank |  | - | NONE |  |  |  |  |  | 2016 |  | - |  | - |  | - |  | - |
| Bonds Dated: 11-06-13 |  | - | NONE |  |  |  |  |  | 2017 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2018 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2019 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2020 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2021 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2022 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2023 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2024 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2025 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2026 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2027 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2028 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2029 |  | - |  | - |  | - |  | - |
|  |  | 1,960 | (43) | 1 | 392 | Term | Variable |  | 2030 |  | 1,025 |  | - |  | - |  | 1,025 |
|  |  | 6,990 | (43) | 393 | 1790 | Term | Variable |  | 2031 |  | 6,075 |  | - |  | - |  | 6,075 |
|  |  | 7,075 | (43) | 1791 | 3205 | Term | Variable |  | 2032 |  | 6,290 |  | - |  | - |  | 6,290 |
|  |  | 7,165 | (43) | 3206 | 4638 | Term | Variable |  | 2033 |  | 6,515 |  | - |  | - |  | 6,515 |
|  |  | 7,255 | (43) | 4639 | 6089 | Term | Variable |  | 2034 |  | 6,745 |  | - |  | - |  | 6,745 |
|  |  | 7,345 | (43) | 6090 | 7558 | Term | Variable |  | 2035 |  | 6,980 |  | - |  | - |  | 6,980 |
|  |  | 7,440 | (43) | 7559 | 9046 | Term | Variable |  | 2036 |  | 7,225 |  | - | - | - |  | 7,225 |
|  |  | 7,535 | (43) | 9047 | 10553 | Term | Variable |  | 2037 |  | 7,475 |  | - |  | - |  | 7,475 |
|  |  | 7,630 | (43) | 10554 | 12079 | Term | Variable |  | 2038 |  | 7,735 |  | - |  | - |  | 7,735 |
|  |  | 7,725 | (43) | 12080 | 13624 | Term | Variable |  | 2039 |  | 7,995 |  | - |  | - |  | 7,995 |
|  |  | 7,820 | (43) | 13625 | 15188 | Term | Variable |  | 2040 |  | 8,260 |  | - |  | - |  | 8,260 |
|  |  | 7,920 | (43) | 15189 | 16772 | Term | Variable |  | 2041 |  | 8,540 |  | - | - | - |  | 8,540 |
|  |  | 8,020 | (43) | 16773 | 18376 | Term | Variable |  | 2042 |  | 8,825 |  | - |  | - |  | 8,825 |
|  |  | 8,120 | (43) | 18377 | 20000 | Term | Variable |  | 2043 |  | 9,110 |  | - |  | - |  | 9,110 |
|  | \$ | $\underline{100,000}$ |  |  |  |  |  |  |  | \$ | 98,795 | \$ | - | \$ | - | \$ | 98,795 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

* The Bonds are multi modal variable rate bonds, initiailly issued in a SIFMA Index Mode which expired on October 31, 2016. On November 1, 2016, the bonds were mandatorily tendered for purchase and remarketed into a fixed rate mode for a five-year interest rate period, ending October 31, 2021. At the end of the remarketing period, the Bonds wil be remarketed or refunded into another term period or will be converted into another mode.


## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call | Bond <br> Numbers |  | Bond | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  | Balances Outstanding December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Type | Rates |  |  |  | Issued |  | ired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  | - | 15-May | 2014 |  |  | \$ | - | \$ | - | \$ | - | \$ | - |
| Revenue and Refunding Bonds, |  | 3,140 | NONE | 1 | 628 | Serial | 2.000 |  | 2015 |  | - |  | - |  | - |  | - |
| Series 2014A (No Reserve Fund) |  | 4,480 | NONE | 629 | 1524 | Serial | 3.000 |  | 2016 |  | - |  | - |  | - |  | - |
| Paying Agent: USBank |  | 3,425 | NONE | 1525 | 2209 | Serial | 4.000 |  | 2017 |  | 3,425 |  | - |  | 3,425 |  | - |
| Bonds Dated: 04-30-14 |  | 3,655 | NONE | 2210 | 2940 | Serial | 3.000 |  | 2018 |  | 3,655 |  | - |  | - |  | 3,655 |
|  |  | 7,710 | NONE | 2941 | 4482 | Serial | 5.000 |  | 2019 |  | 7,710 |  | - |  | - |  | 7,710 |
|  |  | 7,960 | NONE | 4483 | 6074 | Serial | 5.000 |  | 2020 |  | 7,960 |  | - |  | - |  | 7,960 |
|  |  | 8,375 | NONE | 6075 | 7749 | Serial | 5.000 |  | 2021 |  | 8,375 |  | - |  | - |  | 8,375 |
|  |  | 8,800 | NONE | 7750 | 9509 | Serial | 5.000 |  | 2022 |  | 8,800 |  | - |  | - |  | 8,800 |
|  |  | 9,265 | NONE | 9510 | 11362 | Serial | 5.000 |  | 2023 |  | 9,265 |  | - |  | - |  | 9,265 |
|  |  | 9,735 | (24) | 11363 | 13309 | Serial | 5.000 |  | 2024 |  | 9,735 |  | - |  | - |  | 9,735 |
|  |  | 10,235 | (24) | 13310 | 15356 | Serial | 5.000 |  | 2025 |  | 10,235 |  | - |  | - |  | 10,235 |
|  |  | 10,770 | (24) | 15357 | 17510 | Serial | 5.000 |  | 2026 |  | 10,770 |  | - |  | - |  | 10,770 |
|  |  | 5,190 | (24) | 17511 | 18548 | Serial | 5.000 |  | 2027 |  | 5,190 |  | - |  | - |  | 5,190 |
|  |  | 5,455 | (24) | 18549 | 19639 | Serial | 5.000 |  | 2028 |  | 5,455 |  | - |  | - |  | 5,455 |
|  |  | 5,735 | (24) | 19640 | 20786 | Serial | 5.000 |  | 2029 |  | 5,735 |  | - |  | - |  | 5,735 |
|  | \$ | $\underline{\text { 103,930 }}$ |  |  |  |  |  |  |  | \$ | 96,310 | \$ | - | \$ | 3,425 | \$ | 92,885 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | $\begin{gathered} \text { Original } \\ \text { Issue } \\ \hline \end{gathered}$ |  | Call | BondNumbers |  | Bond | Interest |  |  |  | ing |  | Trans | ct |  |  | Balances Outstanding |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Type | Rates* | Matur | Dates |  | 2017 |  | ued |  | Retired |  | December 31, 2017 |
| Water System Junior Lien | \$ |  | NONE |  |  |  |  | 1-May | 2014 | \$ | - | \$ | - | \$ | - | \$ | - |
| Revenue and Refunding Bonds, |  | - | NONE |  |  |  |  |  | 2015 |  | - |  | - |  | - |  | - |
| Series 2014B (No Reserve Fund) |  | - | NONE |  |  |  |  |  | 2016 |  | - |  | - |  | - |  |  |
| Paying Agent: USBank |  | - | NONE |  |  |  |  |  | 2017 |  | - |  | - |  | - |  |  |
| Bonds Dated: 04-30-14 |  | - | NONE |  |  |  |  |  | 2018 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2019 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2020 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2021 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2022 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2023 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2024 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2025 |  | - |  | - |  | - |  |  |
|  |  | - | NONE |  |  |  |  |  | 2026 |  | - |  | - |  | - |  | - |
|  |  | - | NONE |  |  |  |  |  | 2027 |  | - |  | - |  | - |  |  |
|  |  | - | NONE |  |  |  |  |  | 2028 |  | - |  | - |  | - |  |  |
|  |  | - | NONE |  |  |  |  |  | 2029 |  | - |  | - |  | - |  |  |
|  |  | 5,990 | (44) | 1 | 1198 | Term | Variable |  | 2030 |  | 5,990 |  | 5,690 |  | 5,990 |  | 5,690 |
|  |  | 6,080 | (44) | 1199 | 2414 | Term | Variable |  | 2031 |  | 6,080 |  | 5,810 |  | 6,080 |  | 5,810 |
|  |  | 6,170 | (44) | 2415 | 3648 | Term | Variable |  | 2032 |  | 6,170 |  | 5,935 |  | 6,170 |  | 5,935 |
|  |  | 6,265 | (44) | 3649 | 4901 | Term | Variable |  | 2033 |  | 6,265 |  | 6,065 |  | 6,265 |  | 6,065 |
|  |  | 6,360 | (44) | 4902 | 6173 | Term | Variable |  | 2034 |  | 6,360 |  | 6,200 |  | 6,360 |  | 6,200 |
|  |  | 6,455 | (44) | 6174 | 7464 | Term | Variable |  | 2035 |  | 6,455 |  | 6,335 |  | 6,455 |  | 6,335 |
|  |  | 6,555 | (44) | 7465 | 8775 | Term | Variable |  | 2036 |  | 6,555 |  | 6,470 |  | 6,555 |  | 6,470 |
|  |  | 6,650 | (44) | 8776 | 10105 | Term | Variable |  | 2037 |  | 6,650 |  | 6,610 |  | 6,650 |  | 6,610 |
|  |  | 6,755 | (44) | 10106 | 11456 | Term | Variable |  | 2038 |  | 6,755 |  | 6,755 |  | 6,755 |  | 6,755 |
|  |  | 6,855 | (44) | 11457 | 12827 | Term | Variable |  | 2039 |  | 6,855 |  | 6,900 |  | 6,855 |  | 6,900 |
|  |  | 6,960 | (44) | 12828 | 14219 | Term | Variable |  | 2040 |  | 6,960 |  | 7,050 |  | 6,960 |  | 7,050 |
|  |  | 7,065 | (44) | 14220 | 15632 | Term | Variable |  | 2041 |  | 7,065 |  | 7,205 |  | 7,065 |  | 7,205 |
|  |  | 7,170 | (44) | 15633 | 17066 | Term | Variable |  | 2042 |  | 7,170 |  | 7,360 |  | 7,170 |  | 7,360 |
|  |  | 7,280 | (44) | 17067 | 18522 | Term | Variable |  | 2043 |  | 7,280 |  | 7,520 |  | 7,280 |  | 7,520 |
|  |  | 7,390 | (44) | 18523 | 20000 | Term | Variable |  | 2044 |  | 7,390 |  | 7,685 |  | 7,390 |  | 7,685 |
|  | \$ | $\underline{100,000}$ |  |  |  |  |  |  |  | \$ | 100,000 | \$ | 99,590 | \$ | 100,000 | \$ | 99,590 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

* The Bonds are multi modal variable rate bonds, initiailly issued in a SIFMA Index Mode which expired on October 31, 2017. On November 1, 2017, the bonds were mandatorily tendered for purchase and remarketed into a fixed rate mode for a five-year interest rate period, ending October 31, 2022. At the end of the remarketing period, the Bonds wil be remarketed or refunded into another term period or will be converted into another mode.

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call | Bond <br> Numbers |  | BondType | Interest Rates | Maturity Dates |  | Balances Outstanding January 1, 2017 |  |  | Transactions |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  |  |  |  |  |  |  |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2014 | \$ | - | \$ | - | - | \$ | - |
| Revenue Bonds, Series 2014C |  | 1,070 | NONE | 1 | 214 | Serial | 0.000 |  | 2015 |  | - |  | - | - |  | - |
| Paying Agent: Bank of New York |  | 1,070 | NONE | 215 | 428 | Serial | 0.000 |  | 2016 |  | - |  | - | - |  | - |
| Bonds Dated: 06-18-14 |  | 1,070 | NONE | 429 | 642 | Serial | 0.000 |  | 2017 |  | 1,070 |  | - | 1,070 |  | - |
|  |  | 1,070 | NONE | 643 | 856 | Serial | 0.000 |  | 2018 |  | 1,070 |  | - | - |  | 1,070 |
|  |  | 1,070 | NONE | 857 | 1070 | Serial | 0.150 |  | 2019 |  | 1,070 |  | - | - |  | 1,070 |
|  |  | 1,075 | NONE | 1071 | 1285 | Serial | 0.450 |  | 2020 |  | 1,075 |  | - | - |  | 1,075 |
|  |  | 1,080 | NONE | 1286 | 1501 | Serial | 0.740 |  | 2021 |  | 1,080 |  | - | - |  | 1,080 |
|  |  | 1,090 | NONE | 1502 | 1719 | Serial | 0.970 |  | 2022 |  | 1,090 |  | - | - |  | 1,090 |
|  |  | 1,100 | NONE | 1720 | 1939 | Serial | 1.150 |  | 2023 |  | 1,100 |  | - | - |  | 1,100 |
|  |  | 1,115 | NONE | 1940 | 2162 | Serial | 1.290 |  | 2024 |  | 1,115 |  | - | - |  | 1,115 |
|  |  | 1,130 | (25) | 2163 | 2388 | Serial | 1.420 |  | 2025 |  | 1,130 |  | - | - |  | 1,130 |
|  |  | 1,145 | (25) | 2389 | 2617 | Serial | 1.550 |  | 2026 |  | 1,145 |  | - | - |  | 1,145 |
|  |  | 1,165 | (25) | 2618 | 2850 | Serial | 1.650 |  | 2027 |  | 1,165 |  | - | - |  | 1,165 |
|  |  | 1,185 | (25) | 2851 | 3087 | Serial | 1.740 |  | 2028 |  | 1,185 |  | - | - |  | 1,185 |
|  |  | 1,205 | (25) | 3088 | 3328 | Serial | 1.830 |  | 2029 |  | 1,205 |  | - | - |  | 1,205 |
|  |  | 1,230 | (25) | 3329 | 3574 | Serial | 1.910 |  | 2030 |  | 1,230 |  | - | - |  | 1,230 |
|  |  | 1,250 | (25) | 3575 | 3824 | Serial | 1.990 |  | 2031 |  | 1,250 |  | - | - |  | 1,250 |
|  |  | 1,280 | (25) | 3825 | 4080 | Serial | 2.070 |  | 2032 |  | 1,280 |  | - | - |  | 1,280 |
|  |  | 1,305 | (25) | 4081 | 4341 | Serial | 2.140 |  | 2033 |  | 1,305 |  | - | - |  | 1,305 |
|  |  | 1,335 | (25) | 4342 | 4608 | Serial | 2.200 |  | 2034 |  | 1,335 |  | - | - |  | 1,335 |
|  |  | 1,365 | (25) | 4609 | 4881 | Serial | 2.260 |  | 2035 |  | 1,365 |  | - | - |  | 1,365 |
|  |  | 1,395 | (25) | 4882 | 5160 | Serial | 2.310 |  | 2036 |  | 1,395 |  | - | - |  | 1,395 |
|  |  | 1,430 | (25) | 5161 | 5446 | Serial | 2.350 |  | 2037 |  | 1,430 |  | - | - |  | 1,430 |
|  |  | 1,465 | (25) | 5447 | 5739 | Serial | 2.380 |  | 2038 |  | 1,465 |  | - | - |  | 1,465 |
|  |  | 1,500 | (25) | 5740 | 6039 | Serial | 2.410 |  | 2039 |  | 1,500 |  | - | - |  | 1,500 |
|  |  | 1,535 | (25) | 6040 | 6346 | Serial | 2.430 |  | 2040 |  | 1,535 |  | - | - |  | 1,535 |
|  |  | 1,575 | (25) | 6347 | 6661 | Serial | 2.450 |  | 2041 |  | 1,575 |  | - | - |  | 1,575 |
|  |  | 1,610 | (25) | 6662 | 6983 | Serial | 2.450 |  | 2042 |  | 1,610 |  | - | - |  | 1,610 |
|  |  | 1,650 | (25) | 6984 | 7313 | Serial | 2.460 |  | 2043 |  | 1,650 |  | - | - |  | 1,650 |
|  |  | 1,695 | (25) | 7314 | 7652 | Serial | 2.460 |  | 2044 |  | 1,695 |  | - | - |  | 1,695 |
|  | \$ | 38,260 |  |  |  |  |  |  |  | \$ | 36,120 | \$ | - | 1,070 | \$ | 35,050 |

[^7]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | $\begin{aligned} & \text { Original } \\ & \text { Issue } \end{aligned}$ |  | Call | Bond <br> Numbers |  | Bond Type | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  | Balances Outstanding December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Rates |  |  |  | Issued |  | Retired |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2014 | \$ | - | \$ | - | \$ | - | - |
| Revenue Bonds, Series 2014D |  | 1,055 | NONE | 1 | 211 | Serial | 0.000 |  | 2015 |  | - |  | - |  | - | - |
| Paying Agent: Bank of New York |  | 1,050 | NONE | 212 | 421 | Serial | 0.000 |  | 2016 |  | - |  | - |  | - | - |
| Bonds Dated: 06-19-14 |  | 1,050 | NONE | 422 | 631 | Serial | 0.000 |  | 2017 |  | 1,050 |  | - |  | 1,050 | - |
|  |  | 1,050 | NONE | 632 | 841 | Serial | 0.000 |  | 2018 |  | 1,050 |  | - |  | - | 1,050 |
|  |  | 1,055 | NONE | 842 | 1052 | Serial | 0.020 |  | 2019 |  | 1,055 |  | - |  | - | 1,055 |
|  |  | 1,055 | NONE | 1053 | 1263 | Serial | 0.300 |  | 2020 |  | 1,055 |  | - |  | - | 1,055 |
|  |  | 1,060 | NONE | 1264 | 1475 | Serial | 0.590 |  | 2021 |  | 1,060 |  | - |  | - | 1,060 |
|  |  | 1,065 | NONE | 1476 | 1688 | Serial | 0.810 |  | 2022 |  | 1,065 |  | - |  | - | 1,065 |
|  |  | 1,075 | NONE | 1689 | 1903 | Serial | 1.000 |  | 2023 |  | 1,075 |  | - |  | - | 1,075 |
|  |  | 1,090 | NONE | 1904 | 2121 | Serial | 1.120 |  | 2024 |  | 1,090 |  | - |  | - | 1,090 |
|  |  | 1,100 | (26) | 2122 | 2341 | Serial | 1.240 |  | 2025 |  | 1,100 |  | - |  | - | 1,100 |
|  |  | 1,115 | (26) | 2342 | 2564 | Serial | 1.350 |  | 2026 |  | 1,115 |  | - |  | - | 1,115 |
|  |  | 1,130 | (26) | 2565 | 2790 | Serial | 1.440 |  | 2027 |  | 1,130 |  | - |  | - | 1,130 |
|  |  | 1,145 | (26) | 2791 | 3019 | Serial | 1.530 |  | 2028 |  | 1,145 |  | - |  | - | 1,145 |
|  |  | 1,165 | (26) | 3020 | 3252 | Serial | 1.620 |  | 2029 |  | 1,165 |  | - |  | - | 1,165 |
|  |  | 1,185 | (26) | 3253 | 3489 | Serial | 1.690 |  | 2030 |  | 1,185 |  | - |  | - | 1,185 |
|  |  | 1,205 | (26) | 3490 | 3730 | Serial | 1.760 |  | 2031 |  | 1,205 |  | - |  | - | 1,205 |
|  |  | 1,225 | (26) | 3731 | 3975 | Serial | 1.830 |  | 2032 |  | 1,225 |  | - |  | - | 1,225 |
|  |  | 1,250 | (26) | 3976 | 4225 | Serial | 1.900 |  | 2033 |  | 1,250 |  | - |  | - | 1,250 |
|  |  | 1,275 | (26) | 4226 | 4480 | Serial | 1.960 |  | 2034 |  | 1,275 |  | - |  | $-$ | 1,275 |
|  | \$ | $\underline{22,400}$ |  |  |  |  |  |  |  | \$ | 20,295 | \$ | - | \$ | 1,050 | 19,245 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)


[^8]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)



Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call | Bond <br> Numbers |  | Bond | Interest | Maturity Dates |  |  | Balances Outstanding | Transactions |  |  |  | Balances Outstanding December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Type | Rates |  |  |  | January 1, 2017 |  | Issued |  | Retired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  | - | 15-May | 2016 | \$ | - | \$ | - | \$ | - | \$ | - |
| Revenue Refunding Bonds, |  | - |  |  |  |  | - |  | 2017 |  | - |  | - |  | - |  | - |
| Series 2016A (No Reserve Fund) |  | 5,055 | NONE | 1 | 1011 | Serial | 5.000\% |  | 2018 |  | 5,055 |  | - |  | - |  | 5,055 |
| Paying Agent: USBank |  | 3,335 | NONE | 1012 | 1678 | Serial | 5.000\% |  | 2019 |  | 3,335 |  | - |  | - |  | 3,335 |
| Bonds Dated: 02-25-16 |  | 10,710 | NONE | 1679 | 3820 | Serial | 5.000\% |  | 2020 |  | 10,710 |  | - |  | - |  | 10,710 |
|  |  | 1,225 | NONE | 3821 | 4065 | Serial | 4.000\% |  | 2021 |  | 1,225 |  | - |  | - |  | 1,225 |
|  |  | 10,030 | NONE | 4066 | 6071 | Serial | 5.000\% |  | 2021 |  | 10,030 |  | - |  | - |  | 10,030 |
|  |  | 11,820 | NONE | 6072 | 8435 | Serial | 5.000\% |  | 2022 |  | 11,820 |  | - |  | - |  | 11,820 |
|  |  | 9,520 | NONE | 8436 | 10339 | Serial | 5.000\% |  | 2023 |  | 9,520 |  | - |  | - |  | 9,520 |
|  |  | 9,995 | NONE | 10340 | 12338 | Serial | 5.000\% |  | 2024 |  | 9,995 |  | - |  | - |  | 9,995 |
|  |  | 10,500 | NONE | 12339 | 14438 | Serial | 5.000\% |  | 2025 |  | 10,500 |  | - |  | - |  | 10,500 |
|  |  | 8,900 | NONE | 14439 | 16218 | Serial | 5.000\% |  | 2026 |  | 8,900 |  | - |  | - |  | 8,900 |
|  |  | 5,970 | (29) | 16219 | 17412 | Serial | 5.000\% |  | 2027 |  | 5,970 |  | - |  | - |  | 5,970 |
|  |  | 1,880 | (29) | 17413 | 17788 | Serial | 5.000\% |  | 2028 |  | 1,880 |  | - |  | - |  | 1,880 |
|  |  | 9,930 | (29) | 17789 | 19774 | Serial | 5.000\% |  | 2029 |  | 9,930 |  | - |  | - |  | 9,930 |
|  |  | 10,425 | (29) | 19775 | 21859 | Serial | 5.000\% |  | 2030 |  | 10,425 |  | - |  | - |  | 10,425 |
|  |  | 16,205 | (29) | 21860 | 25100 | Serial | 5.000\% |  | 2031 |  | 16,205 |  | - |  | - |  | 16,205 |
|  |  | 17,015 | (29) | 25101 | 28503 | Serial | 5.000\% |  | 2032 |  | 17,015 |  | - |  | - |  | 17,015 |
|  |  | 5,805 | (29) | 28504 | 29664 | Serial | 5.000\% |  | 2033 |  | 5,805 |  | - |  | - |  | 5,805 |
|  |  | 6,095 | (29) | 29665 | 30883 | Serial | 5.000\% |  | 2034 |  | 6,095 |  | - |  | - |  | 6,095 |
|  |  | 6,350 | (29) | 30884 | 32153 | Serial | 3.000\% |  | 2035 |  | 6,350 |  | - |  | - |  | 6,350 |
|  |  | 2,940 | (29) | 32154 | 32741 | Serial | 3.000\% |  | 2036 |  | 2,940 |  | - |  | - |  | 2,940 |
|  |  | 3,035 | (29) | 32742 | 33348 | Serial | 3.125\% |  | 2037 |  | 3,035 |  | - |  | - |  | 3,035 |
|  |  | 3,160 | (29) | 33349 | 33980 | Serial | 5.000\% |  | 2038 |  | 3,160 |  | - |  | - |  | 3,160 |
|  |  | 3,320 | (29) | 33981 | 34644 | Serial | 5.000\% |  | 2039 |  | 3,320 |  | - |  | - |  | 3,320 |
|  |  | 345 | (29) | 34645 | 34713 | Serial | 3.250\% |  | 2040 |  | 345 |  | - |  | $-$ |  | 345 |
|  | \$ | 173,565 |  |  |  |  |  |  |  | \$ | 173,565 | \$ | - | \$ | - | \$ | 173,565 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options

San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM REVENUE BONDS |  | Original Issue | $\begin{gathered} \text { Call } \\ \text { Options } \\ \hline \end{gathered}$ | Bond <br> Numbers |  | Bond Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Water System Junior Lien | \$ | 7,155 | (30) | 1 | 1431 | Serial |
| Revenue Refunding Bonds, Taxable |  | 7,895 | (30) | 1432 | 3010 | Serial |
| Series 2016B (No Reserve Fund) |  | 7,960 | (30) | 3011 | 4602 | Serial |
| Paying Agent: USBank |  | 6,995 | (30) | 4603 | 6001 | Serial |
| Bonds Dated: 02-25-16 |  | - |  |  |  |  |
|  |  | - |  |  |  |  |
|  |  | - |  |  |  |  |
|  |  | - |  |  |  |  |
|  |  | - |  |  |  |  |
|  |  | - |  |  |  |  |
|  |  | - |  |  |  |  |
|  |  | - |  |  |  |  |
|  |  | 2,840 | (30) | 6002 | 6569 | Serial |
|  |  | 4,885 | (30) | 6570 | 7546 | Serial |
|  |  | 5,045 | (30) | 7547 | 8555 | Serial |
|  | \$ | 42,775 |  |  |  |  |

[^9]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call | Bond <br> Numbers |  | $\begin{gathered} \text { Bond } \\ \text { Type } \\ \hline \end{gathered}$ | Interest Rates | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  | Balances Outstanding December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  |  |  |  |  |  |  |  |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 5-May |  |  | 2016 | \$ | - | \$ | - | \$ | - | \$ | - |
| Revenue and Refunding Bonds, |  | - |  |  |  |  | - |  | 2017 |  | - |  | - |  | - |  | - |
| Series 2016C (No Reserve Fund) |  | - |  |  |  |  | - |  | 2018 |  | - |  | - |  | - |  | - |
| Paying Agent: USBank |  | 3,360 | NONE | 1 | 672 | Serial | 3.000\% |  | 2019 |  | 3,360 |  | - |  | - |  | 3,360 |
| Bonds Dated: 11-01-16 |  | 3,505 | NONE | 673 | 1373 | Serial | 5.000\% |  | 2020 |  | 3,505 |  | - |  | - |  | 3,505 |
|  |  | 3,685 | NONE | 1374 | 2110 | Serial | 5.000\% |  | 2021 |  | 3,685 |  | - |  | - |  | 3,685 |
|  |  | 3,875 | NONE | 2111 | 2885 | Serial | 5.000\% |  | 2022 |  | 3,875 |  | - |  | - |  | 3,875 |
|  |  | 4,075 | NONE | 2886 | 3700 | Serial | 5.000\% |  | 2023 |  | 4,075 |  | - |  | - |  | 4,075 |
|  |  | 7,290 | NONE | 3701 | 5158 | Serial | 5.000\% |  | 2024 |  | 7,290 |  | - |  | - |  | 7,290 |
|  |  | 7,670 | NONE | 5159 | 6692 | Serial | 5.000\% |  | 2025 |  | 7,670 |  | - |  | - |  | 7,670 |
|  |  | 8,065 | NONE | 6693 | 8305 | Serial | 5.000\% |  | 2026 |  | 8,065 |  | - |  | - |  | 8,065 |
|  |  | 8,470 | (31) | 8306 | 9999 | Serial | 5.000\% |  | 2027 |  | 8,470 |  | - |  | - |  | 8,470 |
|  |  | 8,910 | (31) | 10000 | 11781 | Serial | 5.000\% |  | 2028 |  | 8,910 |  | - |  | - |  | 8,910 |
|  |  | 9,365 | (31) | 11782 | 13654 | Serial | 5.000\% |  | 2029 |  | 9,365 |  | - |  | - |  | 9,365 |
|  |  | 9,845 | (31) | 13655 | 15623 | Serial | 5.000\% |  | 2030 |  | 9,845 |  | - |  | - |  | 9,845 |
|  |  | 10,345 | (31) | 15624 | 17692 | Serial | 5.000\% |  | 2031 |  | 10,345 |  | - |  | - |  | 10,345 |
|  |  | 10,885 | (31) | 17693 | 19869 | Serial | 5.000\% |  | 2032 |  | 10,885 |  | - |  | - |  | 10,885 |
|  |  | 28,635 | (31) | 19870 | 25596 | Serial | 5.000\% |  | 2033 |  | 28,635 |  | - |  | - |  | 28,635 |
|  |  | 35,180 | (31) | 25597 | 32632 | Serial | 5.000\% |  | 2034 |  | 35,180 |  | - |  | - |  | 35,180 |
|  |  | 18,595 | (31) | 32633 | 36351 | Serial | 5.000\% |  | 2035 |  | 18,595 |  | - |  | - |  | 18,595 |
|  |  | 19,555 | (31) | 36352 | 40262 | Serial | 5.000\% |  | 2036 |  | 19,555 |  | - |  | - |  | 19,555 |
|  |  | 20,450 | (31) | 40263 | 44352 | Serial | 4.000\% |  | 2037 |  | 20,450 |  | - |  | - |  | 20,450 |
|  |  | 14,470 | (31) | 44353 | 47246 | Serial | 4.000\% |  | 2038 |  | 14,470 |  | - |  | - |  | 14,470 |
|  |  | 15,140 | (31)(42) | 47247 | 50274 | Term | 5.000\% |  | 2039 |  | 15,140 |  | - |  | - |  | 15,140 |
|  |  | 6,570 | (31)(42) | 50275 | 51588 | Term | 5.000\% |  | 2040 |  | 6,570 |  | - |  | - |  | 6,570 |
|  |  | 6,905 | (31)(42) | 51589 | 52969 | Term | 5.000\% |  | 2041 |  | 6,905 |  | - |  | - |  | 6,905 |
|  |  | 7,260 | (31)(42) | 52970 | 54421 | Term | 5.000\% |  | 2042 |  | 7,260 |  | - |  | - |  | 7,260 |
|  |  | 7,635 | (31)(42) | 54422 | 55948 | Term | 5.000\% |  | 2043 |  | 7,635 |  | - |  | - |  | 7,635 |
|  |  | 8,025 | (31)(42) | 55949 | 57553 | Term | 5.000\% |  | 2044 |  | 8,025 |  | - |  | - |  | 8,025 |
|  |  | 8,435 | (31)(42) | 57554 | 59240 | Term | 5.000\% |  | 2045 |  | 8,435 |  | - |  | - |  | 8,435 |
|  |  | 8,865 | (31)(42) | 59241 | 61013 | Term | 5.000\% |  | 2046 |  | 8,865 |  | - |  | - |  | 8,865 |
|  | \$ | 305,065 |  |  |  |  |  |  |  | \$ | 305,065 | \$ | - | \$ | - | \$ | 305,065 |

[^10]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | Original Issue |  | Call | BondNumbers |  | Bond | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  | Balances Outstanding December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Type | Rates |  |  |  | Issued |  | Retired |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  | - | 15-May | 2016 |  |  | \$ | - | \$ | - | \$ | - | \$ |  |
| Revenue Bonds, Series 2016D |  | 165 | NONE | 1 | 33 | Serial | 0.000\% |  | 2017 |  | 165 |  | - |  | 165 |  | - |
| Paying Agent: USBank |  | 385 | NONE | 34 | 110 | Serial | 0.000\% |  | 2018 |  | 385 |  | - |  | - |  | 385 |
| Bonds Dated: 12-15-16 |  | 385 | NONE | 111 | 187 | Serial | 0.000\% |  | 2019 |  | 385 |  | - |  | - |  | 385 |
|  |  | 385 | NONE | 188 | 264 | Serial | 0.000\% |  | 2020 |  | 385 |  | - |  | - |  | 385 |
|  |  | 385 | NONE | 265 | 341 | Serial | 0.000\% |  | 2021 |  | 385 |  | - |  | - |  | 385 |
|  |  | 385 | NONE | 342 | 418 | Serial | 0.080\% |  | 2022 |  | 385 |  | - |  | - |  | 385 |
|  |  | 390 | NONE | 419 | 496 | Serial | 0.240\% |  | 2023 |  | 390 |  | - |  | - |  | 390 |
|  |  | 390 | NONE | 497 | 574 | Serial | 0.410\% |  | 2024 |  | 390 |  | - |  | - |  | 390 |
|  |  | 390 | NONE | 575 | 652 | Serial | 0.550\% |  | 2025 |  | 390 |  | - |  | - |  | 390 |
|  |  | 390 | NONE | 653 | 730 | Serial | 0.660\% |  | 2026 |  | 390 |  | - |  | - |  | 390 |
|  |  | 395 | (32) | 731 | 809 | Serial | 0.770\% |  | 2027 |  | 395 |  | - |  | - |  | 395 |
|  |  | 400 | (32) | 810 | 889 | Serial | 0.880\% |  | 2028 |  | 400 |  | - |  | - |  | 400 |
|  |  | 400 | (32) | 890 | 969 | Serial | 0.980\% |  | 2029 |  | 400 |  | - |  | - |  | 400 |
|  |  | 405 | (32) | 970 | 1050 | Serial | 1.050\% |  | 2030 |  | 405 |  | - |  | - |  | 405 |
|  |  | 410 | (32) | 1051 | 1132 | Serial | 1.120\% |  | 2031 |  | 410 |  | - |  | - |  | 410 |
|  |  | 415 | (32) | 1133 | 1215 | Serial | 1.190\% |  | 2032 |  | 415 |  | - |  | - |  | 415 |
|  |  | 420 | (32) | 1216 | 1299 | Serial | 1.250\% |  | 2033 |  | 420 |  | - |  | - |  | 420 |
|  |  | 425 | (32) | 1300 | 1384 | Serial | 1.300\% |  | 2034 |  | 425 |  | - |  | - |  | 425 |
|  |  | 430 | (32) | 1385 | 1470 | Serial | 1.340\% |  | 2035 |  | 430 |  | - |  | - |  | 430 |
|  |  | 435 | (32) | 1471 | 1557 | Serial | 1.370\% |  | 2036 |  | 435 |  | - |  | - |  | 435 |
|  |  | 440 | (32) | 1558 | 1645 | Serial | 1.400\% |  | 2037 |  | 440 |  | - |  | - |  | 440 |
|  |  | 450 | (32) | 1646 | 1735 | Serial | 1.430\% |  | 2038 |  | 450 |  | - |  | - |  | 450 |
|  |  | 455 | (32) | 1736 | 1826 | Serial | 1.460\% |  | 2039 |  | 455 |  | - |  | - |  | 455 |
|  |  | 460 | (32) | 1827 | 1918 | Serial | 1.470\% |  | 2040 |  | 460 |  | - |  | - |  | 460 |
|  |  | 465 | (32) | 1919 | 2011 | Serial | 1.480\% |  | 2041 |  | 465 |  | - |  | - |  | 465 |
|  |  | 475 | (32) | 2012 | 2106 | Serial | 1.490\% |  | 2042 |  | 475 |  | - |  | - |  | 475 |
|  |  | 480 | (32) | 2107 | 2202 | Serial | 1.500\% |  | 2043 |  | 480 |  | - |  | - |  | 480 |
|  |  | 490 | (32) | 2203 | 2300 | Serial | 1.510\% |  | 2044 |  | 490 |  | - |  | - |  | 490 |
|  |  | 495 | (32) | 2301 | 2399 | Serial | 1.520\% |  | 2045 |  | 495 |  | - |  | - |  | 495 |
|  |  | 505 | (32) | 2400 | 2500 | Serial | 1.530\% |  | 2046 |  | 505 |  | - |  | - |  | 505 |
|  | \$ | 12,500 |  |  |  |  |  |  |  | \$ | $\underline{12,500}$ | \$ | - | \$ | 165 | \$ | 12,335 |

[^11]San Antonio Water System
ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017

## (amounts in thousands)

| WATER SYSTEM | $\begin{gathered} \text { Original } \\ \text { Issue } \\ \hline \end{gathered}$ |  | Call | Bond <br> Numbers |  | Bond Type | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  |  | Balances Outstanding <br> December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REVENUE BONDS |  |  | Options |  |  | Rates |  |  |  |  |  |  |  |  |
| Water System Junior Lien | \$ | - |  |  |  |  |  | - | 15-May |  |  | 2016 | \$ | - | \$ | - | \$ | - | \$ | - |
| Revenue Bonds, Series 2016E |  | 185 | NONE | 1 | 37 | Serial | 0.000\% |  | 2017 |  | 185 |  | - |  | 185 |  | - |
| Paying Agent: USBank |  | 440 | NONE | 38 | 125 | Serial | 0.000\% |  | 2018 |  | 440 |  | - |  | - |  | 440 |
| Bonds Dated: 12-15-16 |  | 440 | NONE | 126 | 213 | Serial | 0.000\% |  | 2019 |  | 440 |  | - |  | - |  | 440 |
|  |  | 440 | NONE | 214 | 301 | Serial | 0.000\% |  | 2020 |  | 440 |  | - |  | - |  | 440 |
|  |  | 440 | NONE | 302 | 389 | Serial | 0.040\% |  | 2021 |  | 440 |  | - |  | - |  | 440 |
|  |  | 445 | NONE | 390 | 478 | Serial | 0.130\% |  | 2022 |  | 445 |  | - |  | - |  | 445 |
|  |  | 445 | NONE | 479 | 567 | Serial | 0.290\% |  | 2023 |  | 445 |  | - |  | - |  | 445 |
|  |  | 445 | NONE | 568 | 656 | Serial | 0.460\% |  | 2024 |  | 445 |  | - |  | - |  | 445 |
|  |  | 445 | NONE | 657 | 745 | Serial | 0.600\% |  | 2025 |  | 445 |  | - |  | - |  | 445 |
|  |  | 450 | NONE | 746 | 835 | Serial | 0.710\% |  | 2026 |  | 450 |  | - |  | - |  | 450 |
|  |  | 450 | (33) | 836 | 925 | Serial | 0.820\% |  | 2027 |  | 450 |  | - |  | - |  | 450 |
|  |  | 455 | (33) | 926 | 1016 | Serial | 0.930\% |  | 2028 |  | 455 |  | - |  | - |  | 455 |
|  |  | 460 | (33) | 1017 | 1108 | Serial | 1.030\% |  | 2029 |  | 460 |  | - |  | - |  | 460 |
|  |  | 465 | (33) | 1109 | 1201 | Serial | 1.100\% |  | 2030 |  | 465 |  | - |  | - |  | 465 |
|  |  | 470 | (33) | 1202 | 1295 | Serial | 1.170\% |  | 2031 |  | 470 |  | - |  | - |  | 470 |
|  |  | 475 | (33) | 1296 | 1390 | Serial | 1.240\% |  | 2032 |  | 475 |  | - |  | - |  | 475 |
|  |  | 480 | (33) | 1391 | 1486 | Serial | 1.300\% |  | 2033 |  | 480 |  | - |  | - |  | 480 |
|  |  | 490 | (33) | 1487 | 1584 | Serial | 1.350\% |  | 2034 |  | 490 |  | - |  | - |  | 490 |
|  |  | 495 | (33) | 1585 | 1683 | Serial | 1.390\% |  | 2035 |  | 495 |  | - |  | - |  | 495 |
|  |  | 500 | (33) | 1684 | 1783 | Serial | 1.420\% |  | 2036 |  | 500 |  | - |  | - |  | 500 |
|  |  | 510 | (33) | 1784 | 1885 | Serial | 1.450\% |  | 2037 |  | 510 |  | - |  | - |  | 510 |
|  |  | 515 | (33) | 1886 | 1988 | Serial | 1.480\% |  | 2038 |  | 515 |  | - |  | - |  | 515 |
|  |  | 525 | (33) | 1989 | 2093 | Serial | 1.510\% |  | 2039 |  | 525 |  | - |  | - |  | 525 |
|  |  | 530 | (33) | 2094 | 2199 | Serial | 1.520\% |  | 2040 |  | 530 |  | - |  | - |  | 530 |
|  |  | 540 | (33) | 2200 | 2307 | Serial | 1.530\% |  | 2041 |  | 540 |  | - |  | - |  | 540 |
|  |  | 550 | (33) | 2308 | 2417 | Serial | 1.540\% |  | 2042 |  | 550 |  | - |  | - |  | 550 |
|  |  | 555 | (33) | 2418 | 2528 | Serial | 1.550\% |  | 2043 |  | 555 |  | - |  | - |  | 555 |
|  |  | 565 | (33) | 2529 | 2641 | Serial | 1.560\% |  | 2044 |  | 565 |  | - |  | - |  | 565 |
|  |  | 575 | (33) | 2642 | 2756 | Serial | 1.570\% |  | 2045 |  | 575 |  | - |  | - |  | 575 |
|  |  | 580 | (33) | 2757 | 2872 | Serial | 1.580\% |  | 2046 |  | 580 |  | - |  | - |  | 580 |
|  | \$ | 14,360 |  |  |  |  |  |  |  | \$ | 14,360 | \$ | - | \$ | 185 | \$ | 14,175 |

[^12]
## San Antonio Water System

ANALYSIS OF CHANGES IN BONDED DEBT
For the Year Ended December 31, 2017
(amounts in thousands)

| WATER SYSTEM REVENUE BONDS | Original Issue |  | Call | Bond <br> Numbers |  | Bond | Interest | Maturity Dates |  | Balances Outstanding January 1, 2017 |  | Transactions |  |  |  | Balances Outstanding December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Options |  |  | Type | Rates |  |  |  | ued |  | ired |  |  |
| Water System Junior Lien | \$ | 8,170 | NONE | 1 | 1634 | Serial | $3.000 \%$ | 15-May | 2017 |  |  | \$ |  | \$ | 8,170 | \$ | 8,170 | \$ |  |
| Revenue Refunding Bonds, |  | 4,010 | NONE | 1635 | 2436 | Serial | 3.000 |  | 2018 |  | - |  | 4,010 |  |  |  | 4,010 |
| Series 2017A (No Reserve Fund) |  | 2,660 | NONE | 2437 | 2968 | Serial | 4.000 |  | 2019 |  | - |  | 2,660 |  |  |  | 2,660 |
| Paying Agent: USBank |  | 2,780 | NONE | 2969 | 3524 | Serial | 5.000 |  | 2020 |  | - |  | 2,780 |  |  |  | 2,780 |
| Bonds Dated: 02-28-17 |  | 2,930 | NONE | 3525 | 4110 | Serial | 5.000 |  | 2021 |  | - |  | 2,930 |  |  |  | 2,930 |
|  |  | 3,070 | NONE | 4111 | 4724 | Serial | 5.000 |  | 2022 |  | - |  | 3,070 |  |  |  | 3,070 |
|  |  | 3,235 | NONE | 4725 | 5371 | Serial | 5.000 |  | 2023 |  | - |  | 3,235 |  |  |  | 3,235 |
|  |  | 3,405 | NONE | 5372 | 6052 | Serial | 5.000 |  | 2024 |  | - |  | 3,405 |  |  |  | 3,405 |
|  |  | 3,575 | NONE | 6053 | 6767 | Serial | 5.000 |  | 2025 |  | - |  | 3,575 |  |  |  | 3,575 |
|  |  | 3,760 | NONE | 6768 | 7519 | Serial | 5.000 |  | 2026 |  | - |  | 3,760 |  |  |  | 3,760 |
|  |  | 250 | NONE | 7520 | 7569 | Serial | 4.000 |  | 2027 |  | - |  | 250 |  |  |  | 250 |
|  |  | - |  |  |  |  |  |  | 2028 |  | - |  | - |  |  |  | - |
|  |  | 4,910 | (34) | 7570 | 8551 | Serial | 5.000 |  | 2029 |  | - |  | 4,910 |  |  |  | 4,910 |
|  |  | 5,160 | (34) | 8552 | 9583 | Serial | 5.000 |  | 2030 |  | - |  | 5,160 |  |  |  | 5,160 |
|  |  | 5,415 | (34) | 9584 | 10666 | Serial | 5.000 |  | 2031 |  | - |  | 5,415 |  |  |  | 5,415 |
|  |  | 5,690 | (34) | 10667 | 11804 | Serial | 5.000 |  | 2032 |  | - |  | 5,690 |  |  |  | 5,690 |
|  |  | 9,045 | (34) | 11805 | 13613 | Serial | 5.000 |  | 2033 |  | - |  | 9,045 |  |  |  | 9,045 |
|  |  | 11,945 | (34) | 13614 | 16002 | Serial | 4.000 |  | 2034 |  | - |  | 11,945 |  |  |  | 11,945 |
|  |  | 3,455 | (34) | 16003 | 16693 | Serial | 5.000 |  | 2035 |  | - |  | 3,455 |  |  |  | 3,455 |
|  |  | 3,630 | (34) | 16694 | 17419 | Serial | 5.000 |  | 2036 |  | - |  | 3,630 |  |  |  | 3,630 |
|  |  | 3,820 | (34) | 17420 | 18183 | Serial | 5.000 |  | 2037 |  | - |  | 3,820 |  |  |  | 3,820 |
|  | \$ | 90,915 |  |  |  |  |  |  |  | \$ | - | \$ | $\underline{\text { 90,915 }}$ | \$ | 8,170 | \$ | 82,745 |

Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

San Antonio Water System<br>Analysis of Changes in Bonded Debt

## CALL OPTIONS:

Optional redemption:
(1) Series 2007 Senior Lien, Serial Bonds stated to mature on and after May 15, 2018 and the Term Bonds stated to mature on May 15, 2032 and May 15, 2037, are subject to early redemption, at the option of the City, on May 15, 2017, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the par value thereof plus accrued interest to the redemption date. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.
(2) Series 2009 Senior Lien, Serial Bonds stated to mature on and after May 15, 2019 and the Term Bonds stated to mature on May 15, 2029, May 15, 2034, and May 15, 2039 are subject to early redemption, at the option of the City, on May 15, 2018, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the par value thereof plus accrued interest to the redemption date. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.
(3) Series 2009B Senior Lien Bonds having stated maturities on May 15 in each of the years of 2015 through 2024 are subject to redemption prior to stated maturity, at the option of the City, on December 10, 2009 through May 14, 2019, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof (and if within a stated maturity, selected at random and by lot by the Paying Agent/Registrar), at the Serial Bonds Make-Whole Redemption Price.

Series 2009B Senior Lien Bonds having stated maturities on May 15, 2029 and May 15, 2039 are subject to redemption prior to stated maturity, at the option of the City, on any date, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof (and if within a stated maturity, selected at random and by lot by the Paying Agent/Registrar), at the Term Bonds Make-Whole Redemption Price.

Series 2009B Senior Lien Bonds having stated maturities on May 15 in each of the years of 2020 through 2024 are subject to redemption prior to stated maturity, at the option of the City, on May 15,2019 or day date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof (and if within a stated maturity, selected maturity, selected at random and by lot by the Paying Agent/Registrar), at the redemption price of par, plus accrued interest to the date of redemption.

Series 2009B Senior Lien Bonds are subject to redemption, at the option of the City, on any date prior to their stated maturity, upon the occurrence of an extraordinary event, in whole or in part, by lot, at the Extraordinary Redemption Price.

See the "Optional Redemption of Series 2009B Bonds" within the Official Statement for the City of San Antonio, Texas Water System Revenue Bonds, Series 2009A and Water System Revenue Bonds, Taxable Series 2009B (Direct Subsidy - Build America Bonds) for additional information.
(4) Series 2010B Senior Lien Bonds having a stated maturity of May 14, 2040 are subject to redemption prior to stated maturity, at the option of the City, on any date from November 23, 2010 through their stated maturity at the Make-Whole Redemption Price or, upon the occurrence of an Extraordinary Event, at the Extraordinary Redemption Price.

Series 2010B Senior Lien Bonds having stated maturities of May 15, 2012 through May 15, 2025, May 15, 2032, and May 15, 2034 are subject to redemption prior to stated maturity, at the option of the City, on any date from November 23, 2010 through May 14, 2010 at the Make-Whole Redemption Price or, upon the occurrence of an Extraordinary Event, at the Extraordinary Redemption Price.

San Antonio Water System<br>Analysis of Changes in Bonded Debt

Series 2010B Senior Lien Bonds having stated maturities of May 15, 2021 through May 15, 2025, May 15, 2032, and May 15, 2034 are subject to redemption prior to stated maturity, at the option of the city, on May 15, 2020 or any date thereafter, at the price of par plus accrued interest to the date of redemption.

Bonds redeemed to the City's option may be redeemed in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof (and if within a stated maturity, selected at random and by lot by the Paying Agent/Registrar).

See "Optional Redemption" within the Official Statement for the City of San Antonio, Texas Water System Revenue Bonds, Taxable Series 2010B (Direct Subsidy - Build America Bonds) for additional information.

Series 2011 Senior Lien, Serial Bonds stated to mature on and after May 15, 2022 are subject to early redemption, at the option of the City, on May 15, 2021, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the par value thereof plus accrued interest to the redemption date. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.
(6) Series 2011A Senior Lien, Serial Bonds stated to mature on and after May 15, 2021 and the Term Bonds stated to mature on May 15, 2036 and May 15, 2041 are subject to early redemption, at the option of the City, on May 15, 2020, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the par value thereof plus accrued interest to the redemption date. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2012 Senior Lien, Serial Bonds stated to mature on and after May 15, 2023 are subject to early redemption, at the option of the City, on May 15, 2022, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the par value thereof plus accrued interest to the redemption date. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.
(8) Series 2012A Senior Lien, Serial Bonds stated to mature on and after May 15, 2023 and the Term Bonds stated to mature on May 15, 2034, May 15, 2040, and May 15, 2042 are subject to early redemption, at the option of the City, on May 15, 2022, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the par value thereof plus accrued interest to the redemption date. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.
(9) Series 2007 Junior Lien, Serial Bonds stated to mature on and after May 15, 2018, may be redeemed prior to their Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2017, or on any Interest Payment Date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2007A Junior Lien, Serial Bonds stated to mature on and after May 15, 2018 may be redeemed prior to their Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2017, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2008 Junior Lien, Serial Bonds stated to mature on and after May 15, 2019 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2018, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the

# San Antonio Water System <br> Analysis of Changes in Bonded Debt 

date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2008A Junior Lien, Serial Bonds stated to mature on and after May 15, 2019 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2018, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2009 Junior Lien, Serial Bonds stated to mature on and after May 15, 2020 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on November 15, 2019, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2009A Junior Lien, Serial Bonds stated to mature on and after May 15, 2020 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on November 15, 2019, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2010A Junior Lien, Serial Bonds stated to mature on and after May 15, 2021 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2020, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2011 Junior Lien, Serial Bonds stated to mature on and after May 15, 2022 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2021, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2011A Junior Lien, Serial Bonds stated to mature on and after May 15, 2022 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2021, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2012 Junior Lien, Serial Bonds stated to mature on and after May 15, 2023 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2022, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2013A Junior Lien, Serial Bonds stated to mature on and after May 15, 2024 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2023, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the

# San Antonio Water System <br> Analysis of Changes in Bonded Debt 

date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2013B Junior Lien, Serial Bonds stated to mature on and after May 15, 2024 are subject to early redemption, at the option of the City, on May 15, 2023, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2013C Junior Lien, Serial Bonds stated to mature on and after May 15, 2024 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2023, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2013E Junior Lien, Serial Bonds stated to mature on and after May 15, 2024 are subject to early redemption, at the option of the City, on May 15, 2023, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.
Series 2013D Junior Lien, Serial Bonds stated to mature on and after May 15, 2024 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2023, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2014A Junior Lien, Serial Bonds stated to mature on and after May 15, 2024 are subject to early redemption, at the option of the City, on November 15, 2023, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2014C Junior Lien, Serial Bonds stated to mature on and after May 15, 2025 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2024, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2014D Junior Lien, Serial Bonds stated to mature on and after May 15, 2025 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on May 15, 2024, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2015A Junior Lien, Serial Bonds stated to mature on and after May 15, 2025 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on November 15, 2024, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

San Antonio Water System<br>Analysis of Changes in Bonded Debt

Series 2017A Junior Lien, Serial Bonds stated to mature on and after May 15, 2029 shall be subject to redemption prior to Stated Maturities at the option of the City, on May 15, 2027, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

## Mandatory redemption:

Series 2015B Junior Lien, Serial Bonds stated to mature on and after May 15, 2026 and the Term Bonds stated to mature on May 15, 2039 and May 15, 2045 are subject to early redemption, at the option of the City, on May 15, 2025, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2016A Junior Lien, Serial Bonds stated to mature on and after May 15, 2027 are subject to early redemption, at the option of the City, on May 15, 2026, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2016B Junior Lien, Serial Bonds are subject to redemption at the option of the City on any date from the Date of Delivery through stated maturity, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof, at the Make-Whole Redemption Price. See "Redemption" within the Official Statement for the City of San Antonio, Texas Water System Junior Lien Revenue Refunding Bonds, Series 2016A (No Reserve Fund) and Water System Junior Lien Revenue Refunding Bonds, Taxable Series 2016B (No Reserve Fund) for additional information.

Series 2016C Junior Lien, Serial Bonds stated to mature on and after May 15, 2027 and the Term Bonds stated to mature on May 15, 2041 and May 15, 2046 are subject to early redemption, at the option of the City, on November 15, 2026, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2016D Junior Lien, Serial Bonds stated to mature on and after May 15, 2027 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on November 15, 2026, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

Series 2016E Junior Lien, Serial Bonds stated to mature on and after May 15, 2027 shall be subject to redemption prior to Stated Maturities, in inverse order of Stated Maturity, at the option of the City, on November 15, 2026, or on any date thereafter, in whole or in part, in principal amounts of $\$ 5,000$ or any integral multiple thereof at the redemption price of par, together with accrued interest to the date of redemption. Bonds having the same maturity will be selected at random and by lot by the Paying Agent/ Registrar.

The Series 2007, Term Bonds are subject to mandatory sinking fund redemption prior to their stated maturities from money required to be deposited in the Debt Service 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 redemption in the following principal amounts on May 15 in each of the years as follows:

# San Antonio Water System <br> Analysis of Changes in Bonded Debt 

| Term Bonds |  | Term Bonds |  |
| :---: | :---: | :---: | :---: |
| Stated to Mature |  | Stated to Mature |  |
| On May 15, 2032 |  | On May 15, 2037 |  |
| (amounts in thousands) |  | (amounts in thousands) |  |
| Year | Principal | Year | Principal |
| 2030 | \$ 16,965 | 2033 | \$28,645 |
| 2031 | 17,730 | 2034 | 37,530 |
| 2032 | 18,525 (1) | 2035 | 11,900 |
|  |  | 2036 | 12,450 |
|  |  | 2037 | 13,025 (1) |

(36)

The Series 2009, Term Bonds are subject to mandatory sinking fund redemption prior to their stated maturities from money required to be deposited in the Debt Service 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 redemption in the following principal amounts on May 15 in each of the years as follows:

|  |  |  | nds |  | nds |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stat | ature | State | Mature | Stat | Mature |
| On | 2029 | On | 5,2034 | On | , 2039 |
| (amour | usands) | (amou | ousands) | (amon | ousands) |
| Year | Principal <br> Amount | Year | Principal Amount | Year | Principal Amount |
| 2025 | \$ 4,485 | 2030 | \$ 6,305 | 2035 | \$ 8,205 |
| 2026 | 5,140 | 2031 | 6,645 | 2036 | 8,660 |
| 2027 | 5,410 | 2032 | 7,005 | 2037 | 9,135 |
| 2028 | 2,695 | 2033 | 7,385 | 2038 | 9,640 |
| 2029 | 4,325 (1) | 2034 | 7,780 (1) | 2039 | 10,175 (1) |

(37) The Series 2009B, Term Bonds are subject to mandatory sinking fund redemption prior to their stated maturities from money required to be deposited in the Debt Service Fund for such purpose and shall be redeemed in part, on a pro rata basis in accordance with the arrangements between the City and the securities depository, at the principal amount thereof plus accrued interest to the date of redemption in the following principal amounts on May 15 in each of the years as follows:

|  |  | Term Bonds |  |
| :---: | :---: | :---: | :---: |
| Stated to Mature |  | Stated to Mature |  |
| On May 15, 2029 |  | On May 15, 2039 |  |
| (amounts in thousands) |  | (amounts in thousands) |  |
|  | Principal |  | Principal |
| Year | Amount | Year | Amount |
| 2025 | \$ 3,650 | 2030 | \$ 4,385 |
| 2026 | 4,995 | 2031 | 4,550 |
| 2027 | 3,965 | 2032 | 4,715 |
| 2028 | 3,330 | 2033 | 4,890 |
| 2029 | 4,230 (1) | 2034 | 5,075 |
|  |  | 2035 | 5,260 |
|  |  | 2036 | 5,455 |
|  |  | 2037 | 5,660 |
|  |  | 2038 | 5,870 |
|  |  | 2039 | 6,085 (1) |

The Series 2010B, Term Bonds are subject to mandatory sinking fund redemption prior to their stated maturities from money required to be deposited in the Debt Service Fund for such purpose and shall be redeemed in part, on a pro rata basis in accordance with the arrangements between the

## San Antonio Water System <br> Analysis of Changes in Bonded Debt

City and the securities depository (or, if such selection methodology is administratively impressible or otherwise unavailable, at random and by lot), at the principal amount thereof plus accrued interest to the date of redemption in the following principal amounts on May 15 in each of the years as follows:

Term Bonds
Stated to Mature
On May 15, 2032
(amounts in thousands)

| Year | Principal <br> Amount |
| :---: | :---: |
| 2026 | $\$ 2,255$ |
| 2027 | 2,350 |
| 2028 | 2,445 |
| 2029 | 2,545 |
| 2030 | 2,650 |
| 2031 | 2,760 |
| 2032 | $2,870(1)$ |

Term Bonds Stated to Mature
On May 15, 2034
(amounts in thousands)

| Year | Principal <br> Amount |
| :---: | :---: |
| 2033 | $\$ 2,990$ |
| 2034 | $33,560(1)$ |

Term Bonds
Stated to Mature
On May 15, 2040
(amounts in thousands)

| Year | Principal <br> Amount |
| :---: | :---: |
| 2035 | $\$ 4,495$ |
| 2036 | 4,670 |
| 2037 | 4,855 |
| 2038 | 5,045 |
| 2039 | 5,240 |
| 2040 | $5,445(1)$ |

## (39)

(40)

The Series 2011A, Term Bonds are subject to mandatory sinking fund redemption prior to their stated maturities from money required to be deposited in the Debt Service 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 redemption in the following principal amounts on May 15 in each of the years as follows:

Term Bonds
Stated to Mature
On May 15, 2041
(amounts in thousands)

| Year | Principal <br> Amount |
| :---: | :---: |
| 2037 | $\$ 3,010$ |
| 2038 | 3,165 |
| 2039 | 3,330 |
| 2040 | 3,500 |
| 2041 | $3,680(1)$ |

The Series 2012A, Term Bonds are subject to mandatory sinking fund redemption prior to their stated maturities from money required to be deposited in the Debt Service 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 redemption in the following principal amounts on May 15 in each of the years as follows:

| Term Bonds |  |
| :---: | :---: |
| Stated to Mature |  |
| On May 15, 2034 |  |
| (amounts in thousands) |  |
|  | Principal |
| Year | Amount |
| 2032 | \$ 6,310 |
| 2033 | 6,570 |
| 2034 | 6,840 (1) |


| Term Bonds |  |
| :---: | :---: |
| Stated to Mature |  |
| On May 15, 2040 |  |
| (amounts in thousands) |  |
| Year | Principal |
| 2037 | \$ 3,765 |
| 2038 | 8,310 |
| 2039 | 8,740 |
| 2040 | 9,185 (1) |

## San Antonio Water System <br> Analysis of Changes in Bonded Debt

and shall be redeemed in part, by lot or other customary method, at the principal amount thereof plus accrued interest to the date of redemption in the following principal amounts on May 15 in each of the years as follows:

| Term Bonds <br> Stated to Mature <br> On May 15, 2039 | Term Bonds <br> Stated to Mature |
| :---: | :---: |
| (amounts in thousands)  <br>  Principal | On May 15, 2045 <br> (amounts in thousands) |
| Year | Amount |

(42) The Series 2016C, Term Bonds are subject to mandatory sinking fund redemption prior to their stated maturities from money required to be deposited in the Debt Service 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 redemption in the following principal amounts on May 15 in each of the years as follows:

| Term Bonds <br> Stated to Mature <br> On May 15, 2041 | Term Bonds <br> Stated to Mature |
| :---: | :---: |
| (amounts in thousands) <br> Principal | On May 15, 2046 <br> (amounts in thousands) |
| Year | Amount |

Mandatory Tender:
(43) On November 1, 2021, the Series 2013F Bonds are subject to mandatory tender without right of retention. Each owner of the bonds will be required to tender, and in any event will be deemed to have tendered, the bonds to the Tender Agent for purchase at a purchase price equal to $100 \%$ of the principal amount plus accrued interest, if any.

The Tender agent is required to give notice of mandatory tender to each registered owner of the bonds affected by mandatory tender by mail, first class postage prepaid, not more than 60 nor less than 30 days, while the bonds are in a Term Mode.

The bonds are subject to mandatory sinking fund redemption prior to their stated maturities at a redemption price equal to $100 \%$ of principal amount thereof, without premium, on May 1 of the years and in the principal amounts indicated below:

> Term Bonds Stated to Mature
> $\underline{\text { On May } 1}$
> (amounts in thousands)

Principal

## San Antonio Water System Analysis of Changes in Bonded Debt

| Year | Amount |
| :---: | :---: |
| 2030 | $\$ 1,025$ |
| 2031 | 6,075 |
| 2032 | 6,290 |
| 2033 | 6,515 |
| 2034 | 6,745 |
| 2035 | 6,980 |
| 2036 | 7,225 |
| 2037 | 7,475 |
| 2038 | 7,735 |
| 2039 | 7,995 |
| 2040 | 8,260 |
| 2041 | 8,540 |
| 2042 | 8,825 |
| 2043 | 9,110 |

(44) On November 1, 2022, the Series 2014B Bonds are subject to mandatory tender without right of retention. Each owner of the bonds will be required to tender, and in any event will be deemed to have tendered, the bonds to the Tender Agent for purchase at a purchase price equal to $100 \%$ of the principal amount plus accrued interest, if any.

The Tender agent is required to give notice of mandatory tender to each registered owner of the bonds affected by mandatory tender by mail, first class postage prepaid, not more than 60 nor less than 30 days, while the Bonds are in a Term Mode.

The bonds are subject to mandatory sinking fund redemption prior to their stated maturities at a redemption price equal to $100 \%$ of principal amount thereof, without premium, on May 1 of the years and in the principal amounts indicated below:

| Term Bonds Stated to Mature |  |
| :---: | :---: |
|  |  |
|  | ay 1 |
| (amounts in thousands) |  |
| Principal |  |
| Year | Amount |
| 2030 | \$ 5,690 |
| 2031 | 5,810 |
| 2032 | 5,935 |
| 2033 | 6,065 |
| 2034 | 6,200 |
| 2035 | 6,335 |
| 2036 | 6,470 |
| 2037 | 6,610 |
| 2038 | 6,755 |
| 2039 | 6,900 |
| 2040 | 7,050 |
| 2041 | 7,205 |
| 2042 | 7,360 |
| 2043 | 7,520 |
| 2044 | 7,685 (1) |

(1) Payable at stated maturity

# San Antonio Water System <br> WATER SYSTEM REVENUE BONDS <br> TOTAL DEBT SERVICE TO MATURITY 

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|  | Principal | $\underline{\text { Interest }}$ | Interest Rate Subsidy* | Net <br> Interest | Total Payment | $\begin{gathered} \text { Total } \\ \text { Annual Payment } \end{gathered}$ | Total Debt <br> Outstanding |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01-May-2018 | \$ | \$ 1,984 | \$ | \$ 1,984 | 1,984 | \$ | \$ |
| 15-May-2018 | 84,875 | 50,310 | 1,790 | 48,520 | 133,395 |  |  |
| 01-Nov-2018 |  | 1,984 |  | 1,984 | 1,984 |  |  |
| 15-Nov-2018 |  | 48,927 | 1,757 | 47,170 | 47,170 | 184,533 | 2,452,645 |
| 01-May-2019 |  | 1,984 |  | 1,984 | 1,984 |  |  |
| 15-May-2019 | 85,930 | 48,927 | 1,757 | 47,170 | 133,100 |  |  |
| 01-Nov-2019 |  | 1,984 |  | 1,984 | 1,984 |  |  |
| 15-Nov-2019 |  | 47,524 | 1,724 | 45,800 | 45,800 | 182,868 | 2,366,715 |
| 01-May-2020 |  | 1,984 |  | 1,984 | 1,984 |  |  |
| 15-May-2020 | 89,800 | 47,524 | 1,724 | 45,800 | 135,600 |  |  |
| 01-Nov-2020 |  | 1,984 |  | 1,984 | 1,984 |  |  |
| 15-Nov-2020 |  | 45,721 | 1,688 | 44,033 | 44,033 | 183,601 | 2,276,915 |
| 01-May-2021 |  | 1,984 |  | 1,984 | 1,984 |  |  |
| 15-May-2021 | 94,425 | 45,721 | 1,688 | 44,033 | 138,458 |  |  |
| 01-Nov-2021 |  | 1,984 |  | 1,984 | 1,984 |  |  |
| 15-Nov-2021 |  | 43,740 | 1,648 | 42,092 | 42,092 | 184,518 | 2,182,490 |
| 01-May-2022 |  | 2,231 |  | 2,231 | 2,231 |  |  |
| 15-May-2022 | 98,005 | 43,740 | 1,648 | 42,092 | 140,097 |  |  |
| 01-Nov-2022 |  | 2,231 |  | 2,231 | 2,231 |  |  |
| 15-Nov-2022 |  | 41,624 | 1,607 | 40,017 | 40,017 | 184,576 | 2,084,485 |
| 01-May-2023 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-May-2023 | 96,540 | 41,624 | 1,607 | 40,017 | 136,557 |  |  |
| 01-Nov-2023 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-Nov-2023 |  | 39,533 | 1,563 | 37,970 | 37,970 | 179,487 | 1,987,945 |
| 01-May-2024 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-May-2024 | 102,145 | 39,533 | 1,563 | 37,970 | 140,115 |  |  |
| 01-Nov-2024 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-Nov-2024 |  | 37,292 | 1,515 | 35,777 | 35,777 | 180,852 | 1,885,800 |
| 01-May-2025 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-May-2025 | 104,645 | 37,292 | 1,515 | 35,777 | 140,422 |  |  |
| 01-Nov-2025 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-Nov-2025 |  | 34,986 | 1,464 | 33,522 | 33,522 | 178,904 | 1,781,155 |
| 01-May-2026 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-May-2026 | 108,380 | 34,986 | 1,464 | 33,522 | 141,902 |  |  |
| 01-Nov-2026 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-Nov-2026 |  | 32,552 | 1,396 | 31,156 | 31,156 | 178,018 | 1,672,775 |
| 01-May-2027 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-May-2027 | 115,530 | 32,552 | 1,396 | 31,156 | 146,686 |  |  |
| 01-Nov-2027 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-Nov-2027 |  | 29,953 | 1,336 | 28,617 | 28,617 | 180,263 | 1,557,245 |
| 01-May-2028 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-May-2028 | 118,660 | 29,953 | 1,336 | 28,617 | 147,277 |  |  |
| 01-Nov-2028 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-Nov-2028 |  | 27,483 | 1,283 | 26,200 | 26,200 | 178,437 | 1,438,585 |
| 01-May-2029 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-May-2029 | 90,085 | 27,483 | 1,283 | 26,200 | 116,285 |  |  |
| 01-Nov-2029 |  | 2,480 |  | 2,480 | 2,480 |  |  |
| 15-Nov-2029 |  | 25,532 | 1,219 | 24,313 | 24,313 | 145,558 | 1,348,500 |
| 01-May-2030 | 6,715 | 2,480 |  | 2,480 | 9,195 |  |  |
| 15-May-2030 | 82,910 | 25,532 | 1,219 | 24,313 | 107,223 |  |  |
| 01-Nov-2030 |  | 2,396 |  | 2,396 | 2,396 |  |  |
| 15-Nov-2030 |  | 23,749 | 1,151 | 22,598 | 22,598 | 141,412 | 1,258,875 |

# San Antonio Water System <br> WATER SYSTEM REVENUE BONDS <br> TOTAL DEBT SERVICE TO MATURITY 

(amounts in thousands)
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|  |  | Interest | Net |  | Total | Total Debt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Principal | Interest | Rate Subsidv* | Intere | Total Payment | Annual Payment | Outstanding |


| 01-May-2031 | 11,885 | 2,396 |  | 2,396 | 14,281 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2031 | 81,370 | 23,749 | 1,151 | 22,598 | 103,968 |  |  |
| 01-Nov-2031 |  | 2,247 |  | 2,247 | 2,247 |  |  |
| 15-Nov-2031 |  | 21,936 | 1,082 | 20,854 | 20,854 | 141,350 | 1,165,620 |
| 01-May-2032 | 12,225 | 2,247 |  | 2,247 | 14,472 |  |  |
| 15-May-2032 | 83,485 | 21,936 | 1,082 | 20,854 | 104,339 |  |  |
| 01-Nov-2032 |  | 2,095 |  | 2,095 | 2,095 |  |  |
| 15-Nov-2032 |  | 20,064 | 1,010 | 19,054 | 19,054 | 139,960 | 1,069,910 |
| 01-May-2033 | 12,580 | 2,095 |  | 2,095 | 14,675 |  |  |
| 15-May-2033 | 86,820 | 20,064 | 1,010 | 19,054 | 105,874 |  |  |
| 01-Nov-2033 |  | 1,937 |  | 1,937 | 1,937 |  |  |
| 15-Nov-2033 |  | 18,116 | 935 | 17,181 | 17,181 | 139,667 | 970,510 |
| 01-May-2034 | 12,945 | 1,937 |  | 1,937 | 14,882 |  |  |
| 15-May-2034 | 124,160 | 18,116 | 935 | 17,181 | 141,341 |  |  |
| 01-Nov-2034 |  | 1,776 |  | 1,776 | 1,776 |  |  |
| 15-Nov-2034 |  | 15,045 | 547 | 14,498 | 14,498 | 172,497 | 833,405 |
| 01-May-2035 | 13,315 | 1,776 |  | 1,776 | 15,091 |  |  |
| 15-May-2035 | 96,285 | 15,045 | 547 | 14,498 | 110,783 |  |  |
| 01-Nov-2035 |  | 1,609 |  | 1,609 | 1,609 |  |  |
| 15-Nov-2035 |  | 12,882 | 455 | 12,427 | 12,427 | 139,910 | 723,805 |
| 01-May-2036 | 13,695 | 1,609 |  | 1,609 | 15,304 |  |  |
| 15-May-2036 | 96,900 | 12,882 | 455 | 12,427 | 109,327 |  |  |
| 01-Nov-2036 |  | 1,438 |  | 1,438 | 1,438 |  |  |
| 15-Nov-2036 |  | 10,674 | 360 | 10,314 | 10,314 | 136,383 | 613,210 |
| 01-May-2037 | 14,085 | 1,438 |  | 1,438 | 15,523 |  |  |
| 15-May-2037 | 101,005 | 10,674 | 360 | 10,314 | 111,319 |  |  |
| 01-Nov-2037 |  | 1,262 |  | 1,262 | 1,262 |  |  |
| 15-Nov-2037 |  | 8,569 | 261 | 8,308 | 8,308 | 136,412 | 498,120 |
| 01-May-2038 | 14,490 | 1,262 |  | 1,262 | 15,752 |  |  |
| 15-May-2038 | 94,365 | 8,569 | 261 | 8,308 | 102,673 |  |  |
| 01-Nov-2038 |  | 1,081 |  | 1,081 | 1,081 |  |  |
| 15-Nov-2038 |  | 6,389 | 159 | 6,230 | 6,230 | 125,736 | 389,265 |
| 01-May-2039 | 14,895 | 1,081 |  | 1,081 | 15,976 |  |  |
| 15-May-2039 | 95,725 | 6,389 | 159 | 6,230 | 101,955 |  |  |
| 01-Nov-2039 |  | 894 |  | 894 | 894 |  |  |
| 15-Nov-2039 |  | 4,089 | 53 | 4,036 | 4,036 | 122,861 | 278,645 |
| 01-May-2040 | 15,310 | 894 |  | 894 | 16,204 |  |  |
| 15-May-2040 | 78,070 | 4,089 | 53 | 4,036 | 82,106 |  |  |
| 01-Nov-2040 |  | 703 |  | 703 | 703 |  |  |
| 15-Nov-2040 |  | 2,457 |  | 2,457 | 2,457 | 101,470 | 185,265 |
| 01-May-2041 | 15,745 | 703 |  | 703 | 16,448 |  |  |
| 15-May-2041 | 33,765 | 2,457 |  | 2,457 | 36,222 |  |  |
| 01-Nov-2041 |  | 506 |  | 506 | 506 |  |  |
| 15-Nov-2041 |  | 1,825 |  | 1,825 | 1,825 | 55,001 | 135,755 |
| 01-May-2042 | 16,185 | 506 |  | 506 | 16,691 |  |  |
| 15-May-2042 | 30,220 | 1,825 |  | 1,825 | 32,045 |  |  |
| 01-Nov-2042 |  | 304 |  | 304 | 304 |  |  |
| 15-Nov-2042 |  | 1,283 |  | 1,283 | 1,283 | 50,323 | 89,350 |
| 01-May-2043 | 16,630 | 304 |  | 304 | 16,934 |  |  |
| 15-May-2043 | 20,230 | 1,283 |  | 1,283 | 21,513 |  |  |
| 01-Nov-2043 |  | 96 |  | 96 | 96 |  |  |
| 15-Nov-2043 |  | 906 |  | 906 | 906 | 39,449 | 52,490 |

# San Antonio Water System <br> WATER SYSTEM REVENUE BONDS <br> TOTAL DEBT SERVICE TO MATURITY 

(amounts in thousands)
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[^13]
# San Antonio Water System 

## WATER SYSTEM SENIOR LIEN REVENUE BONDS TOTAL DEBT SERVICE TO MATURITY

(amounts in thousands)

|  | Principal |  | Interest |  | Interest Rate Subsidy* |  |  | Net Interest | Total SemiAnnual Payment |  | Total <br> Annual Payment |  | Total Debt Outstanding |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 23,720 | \$ | 18,546 | \$ | 1,790 | \$ | 16,756 | \$ | 40,476 | \$ |  | \$ | 718,305 |
| 15-Nov-2018 |  |  |  | 18,023 |  | 1,757 |  | 16,266 |  | 16,266 |  | 56,742 |  |  |
| 15-May-2019 |  | 19,435 |  | 18,023 |  | 1,757 |  | 16,266 |  | 35,701 |  |  |  | 698,870 |
| 15-Nov-2019 |  |  |  | 17,609 |  | 1,724 |  | 15,885 |  | 15,885 |  | 51,586 |  |  |
| 15-May-2020 |  | 30,070 |  | 17,609 |  | 1,724 |  | 15,885 |  | 45,955 |  |  |  | 668,800 |
| 15-Nov-2020 |  |  |  | 16,908 |  | 1,688 |  | 15,220 |  | 15,220 |  | 61,175 |  |  |
| 15-May-2021 |  | 32,365 |  | 16,908 |  | 1,688 |  | 15,220 |  | 47,585 |  |  |  | 636,435 |
| 15-Nov-2021 |  |  |  | 16,115 |  | 1,648 |  | 14,467 |  | 14,467 |  | 62,052 |  |  |
| 15-May-2022 |  | 35,625 |  | 16,115 |  | 1,648 |  | 14,467 |  | 50,092 |  |  |  | 600,810 |
| 15-Nov-2022 |  |  |  | 15,229 |  | 1,607 |  | 13,622 |  | 13,622 |  | 63,714 |  |  |
| 15-May-2023 |  | 38,170 |  | 15,229 |  | 1,607 |  | 13,622 |  | 51,792 |  |  |  | 562,640 |
| 15-Nov-2023 |  |  |  | 14,276 |  | 1,563 |  | 12,713 |  | 12,713 |  | 64,505 |  |  |
| 15-May-2024 |  | 40,245 |  | 14,276 |  | 1,563 |  | 12,713 |  | 52,958 |  |  |  | 522,395 |
| 15-Nov-2024 |  |  |  | 13,264 |  | 1,515 |  | 11,749 |  | 11,749 |  | 64,707 |  |  |
| 15-May-2025 |  | 42,220 |  | 13,264 |  | 1,515 |  | 11,749 |  | 53,969 |  |  |  | 480,175 |
| 15-Nov-2025 |  |  |  | 12,198 |  | 1,464 |  | 10,734 |  | 10,734 |  | 64,703 |  |  |
| 15-May-2026 |  | 45,505 |  | 12,198 |  | 1,464 |  | 10,734 |  | 56,239 |  |  |  | 434,670 |
| 15-Nov-2026 |  |  |  | 11,034 |  | 1,396 |  | 9,638 |  | 9,638 |  | 65,877 |  |  |
| 15-May-2027 |  | 63,290 |  | 11,034 |  | 1,396 |  | 9,638 |  | 72,928 |  |  |  | 371,380 |
| 15-Nov-2027 |  |  |  | 9,446 |  | 1,336 |  | 8,110 |  | 8,110 |  | 81,038 |  |  |
| 15-May-2028 |  | 66,650 |  | 9,446 |  | 1,336 |  | 8,110 |  | 74,760 |  |  |  | 304,730 |
| 15-Nov-2028 |  |  |  | 7,963 |  | 1,283 |  | 6,680 |  | 6,680 |  | 81,440 |  |  |
| 15-May-2029 |  | 21,225 |  | 7,963 |  | 1,283 |  | 6,680 |  | 27,905 |  |  |  | 283,505 |
| 15-Nov-2029 |  |  |  | 7,408 |  | 1,219 |  | 6,189 |  | 6,189 |  | 34,094 |  |  |
| 15-May-2030 |  | 22,225 |  | 7,408 |  | 1,219 |  | 6,189 |  | 28,414 |  |  |  | 261,280 |
| 15-Nov-2030 |  |  |  | 6,823 |  | 1,151 |  | 5,672 |  | 5,672 |  | 34,086 |  |  |
| 15-May-2031 |  | 23,280 |  | 6,823 |  | 1,151 |  | 5,672 |  | 28,952 |  |  |  | 238,000 |
| 15-Nov-2031 |  |  |  | 6,211 |  | 1,082 |  | 5,129 |  | 5,129 |  | 34,081 |  |  |
| 15-May-2032 |  | 24,340 |  | 6,211 |  | 1,082 |  | 5,129 |  | 29,469 |  |  |  | 213,660 |
| 15-Nov-2032 |  |  |  | 5,603 |  | 1,010 |  | 4,593 |  | 4,593 |  | 34,062 |  |  |
| 15-May-2033 |  | 16,915 |  | 5,603 |  | 1,010 |  | 4,593 |  | 21,508 |  |  |  | 196,745 |
| 15-Nov-2033 |  |  |  | 5,181 |  | 935 |  | 4,246 |  | 4,246 |  | 25,754 |  |  |
| 15-May-2034 |  | 48,065 |  | 5,181 |  | 935 |  | 4,246 |  | 52,311 |  |  |  | 148,680 |
| 15-Nov-2034 |  |  |  | 3,794 |  | 547 |  | 3,247 |  | 3,247 |  | 55,558 |  |  |
| 15-May-2035 |  | 19,635 |  | 3,794 |  | 547 |  | 3,247 |  | 22,882 |  |  |  | 129,045 |
| 15-Nov-2035 |  |  |  | 3,266 |  | 455 |  | 2,811 |  | 2,811 |  | 25,693 |  |  |
| 15-May-2036 |  | 20,510 |  | 3,266 |  | 455 |  | 2,811 |  | 23,321 |  |  |  | 108,535 |
| 15-Nov-2036 |  |  |  | 2,714 |  | 360 |  | 2,354 |  | 2,354 |  | 25,675 |  |  |
| 15-May-2037 |  | 21,430 |  | 2,714 |  | 360 |  | 2,354 |  | 23,784 |  |  |  | 87,105 |
| 15-Nov-2037 |  |  |  | 2,140 |  | 261 |  | 1,879 |  | 1,879 |  | 25,663 |  |  |
| 15-May-2038 |  | 22,390 |  | 2,140 |  | 261 |  | 1,879 |  | 24,269 |  |  |  | 64,715 |
| 15-Nov-2038 |  |  |  | 1,539 |  | 159 |  | 1,380 |  | 1,380 |  | 25,649 |  |  |
| 15-May-2039 |  | 23,395 |  | 1,539 |  | 159 |  | 1,380 |  | 24,775 |  |  |  | 41,320 |
| 15-Nov-2039 |  |  |  | 912 |  | 53 |  | 859 |  | 859 |  | 25,634 |  |  |
| 15-May-2040 |  | 18,130 |  | 912 |  | 53 |  | 859 |  | 18,989 |  |  |  | 23,190 |
| 15-Nov-2040 |  |  |  | 433 |  | - |  | 433 |  | 433 |  | 19,422 |  |  |
| 15-May-2041 |  | 13,265 |  | 433 |  | - |  | 433 |  | 13,698 |  |  |  | 9,925 |
| 15-Nov-2041 |  |  |  | 174 |  | - |  | 174 |  | 174 |  | 13,872 |  |  |
| 15-May-2042 |  | 9,925 |  | 174 |  | - |  | 174 |  | 10,099 |  |  |  | - |
|  |  |  |  |  |  |  |  |  |  |  |  | 10,099 |  |  |
|  | \$ | 742,025 | \$ | 415,072 | \$ | 50,216 | \$ | 364,856 | \$ | 1,106,881 | \$ | 1,106,881 |  |  |

[^14]
# San Antonio Water System 

## WATER SYSTEM REVENUE AND REFUNDING BONDS <br> SERIES 2009

(amounts in thousands)

(DIRECT SUBSIDY - BUILD AMERICA BONDS)
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Interest Rate Subsidy* |  | Total <br> Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 2,910 | \$ | 2,562 | \$ | 838 | \$ | 1,724 | \$ | 4,634 | \$ |  |
| 15-Nov-2018 |  |  |  | 2,497 |  | 816 |  | 1,681 |  | 1,681 |  | 6,315 |
| 15-May-2019 |  | 2,995 |  | 2,497 |  | 816 |  | 1,681 |  | 4,676 |  |  |
| 15-Nov-2019 |  |  |  | 2,429 |  | 794 |  | 1,635 |  | 1,635 |  | 6,311 |
| 15-May-2020 |  | 3,085 |  | 2,429 |  | 794 |  | 1,635 |  | 4,720 |  |  |
| 15-Nov-2020 |  |  |  | 2,356 |  | 770 |  | 1,586 |  | 1,586 |  | 6,306 |
| 15-May-2021 |  | 3,185 |  | 2,356 |  | 770 |  | 1,586 |  | 4,771 |  |  |
| 15-Nov-2021 |  |  |  | 2,277 |  | 744 |  | 1,533 |  | 1,533 |  | 6,304 |
| 15-May-2022 |  | 3,290 |  | 2,277 |  | 744 |  | 1,533 |  | 4,823 |  |  |
| 15-Nov-2022 |  |  |  | 2,193 |  | 717 |  | 1,476 |  | 1,476 |  | 6,299 |
| 15-May-2023 |  | 3,405 |  | 2,193 |  | 717 |  | 1,476 |  | 4,881 |  |  |
| 15-Nov-2023 |  |  |  | 2,104 |  | 688 |  | 1,416 |  | 1,416 |  | 6,297 |
| 15-May-2024 |  | 3,525 |  | 2,104 |  | 688 |  | 1,416 |  | 4,941 |  |  |
| 15-Nov-2024 |  |  |  | 2,009 |  | 657 |  | 1,352 |  | 1,352 |  | 6,293 |
| 15-May-2025 |  | 3,650 |  | 2,009 |  | 657 |  | 1,352 |  | 5,002 |  |  |
| 15-Nov-2025 |  |  |  | 1,909 |  | 624 |  | 1,285 |  | 1,285 |  | 6,287 |
| 15-May-2026 |  | 4,995 |  | 1,909 |  | 624 |  | 1,285 |  | 6,280 |  |  |
| 15-Nov-2026 |  |  |  | 1,771 |  | 579 |  | 1,192 |  | 1,192 |  | 7,472 |
| 15-May-2027 |  | 3,965 |  | 1,771 |  | 579 |  | 1,192 |  | 5,157 |  |  |
| 15-Nov-2027 |  |  |  | 1,662 |  | 543 |  | 1,119 |  | 1,119 |  | 6,276 |
| 15-May-2028 |  | 3,300 |  | 1,662 |  | 543 |  | 1,119 |  | 4,419 |  |  |
| 15-Nov-2028 |  |  |  | 1,571 |  | 514 |  | 1,057 |  | 1,057 |  | 5,476 |
| 15-May-2029 |  | 4,230 |  | 1,571 |  | 514 |  | 1,057 |  | 5,287 |  |  |
| 15-Nov-2029 |  |  |  | 1,455 |  | 476 |  | 979 |  | 979 |  | 6,266 |
| 15-May-2030 |  | 4,385 |  | 1,455 |  | 476 |  | 979 |  | 5,364 |  |  |
| 15-Nov-2030 |  |  |  | 1,332 |  | 435 |  | 897 |  | 897 |  | 6,261 |
| 15-May-2031 |  | 4,550 |  | 1,332 |  | 435 |  | 897 |  | 5,447 |  |  |
| 15-Nov-2031 |  |  |  | 1,205 |  | 394 |  | 811 |  | 811 |  | 6,258 |
| 15-May-2032 |  | 4,715 |  | 1,205 |  | 394 |  | 811 |  | 5,526 |  |  |
| 15-Nov-2032 |  |  |  | 1,073 |  | 351 |  | 722 |  | 722 |  | 6,248 |
| 15-May-2033 |  | 4,890 |  | 1,073 |  | 351 |  | 722 |  | 5,612 |  |  |
| 15-Nov-2033 |  |  |  | 936 |  | 306 |  | 630 |  | 630 |  | 6,242 |
| 15-May-2034 |  | 5,075 |  | 936 |  | 306 |  | 630 |  | 5,705 |  |  |
| 15-Nov-2034 |  |  |  | 794 |  | 259 |  | 535 |  | 535 |  | 6,240 |
| 15-May-2035 |  | 5,260 |  | 794 |  | 259 |  | 535 |  | 5,795 |  |  |
| 15-Nov-2035 |  |  |  | 646 |  | 211 |  | 435 |  | 435 |  | 6,230 |
| 15-May-2036 |  | 5,455 |  | 646 |  | 211 |  | 435 |  | 5,890 |  |  |
| 15-Nov-2036 |  |  |  | 493 |  | 161 |  | 332 |  | 332 |  | 6,222 |
| 15-May-2037 |  | 5,660 |  | 493 |  | 161 |  | 332 |  | 5,992 |  |  |
| 15-Nov-2037 |  |  |  | 335 |  | 109 |  | 226 |  | 226 |  | 6,218 |
| 15-May-2038 |  | 5,870 |  | 335 |  | 109 |  | 226 |  | 6,096 |  |  |
| 15-Nov-2038 |  |  |  | 170 |  | 56 |  | 114 |  | 114 |  | 6,210 |
| 15-May-2039 |  | 6,085 |  | 170 |  | 56 |  | 114 |  | 6,199 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 6,199 |
|  | \$ | 94,480 | \$ | 64,996 | \$ | 21,246 | \$ | 43,750 | \$ | 138,230 | \$ | 138,230 |

[^15]San Antonio Water System
WATER SYSTEM REVENUE TAXABLE BONDS
SERIES 2010B
(DIRECT SUBSIDY - BUILD AMERICA BONDS)
(amounts in thousands)

|  | Principal |  | Interest |  | Interest Rate Subsidy* |  | Total <br> Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 1,785 | \$ | 2,912 | \$ | 952 | \$ | 1,960 | \$ | 3,745 | \$ |  |
| 15-Nov-2018 |  |  |  | 2,879 |  | 941 |  | 1,938 |  | 1,938 |  | 5,683 |
| 15-May-2019 |  | 1,830 |  | 2,879 |  | 941 |  | 1,938 |  | 3,768 |  |  |
| 15-Nov-2019 |  |  |  | 2,844 |  | 930 |  | 1,914 |  | 1,914 |  | 5,682 |
| 15-May-2020 |  | 1,880 |  | 2,844 |  | 930 |  | 1,914 |  | 3,794 |  |  |
| 15-Nov-2020 |  |  |  | 2,807 |  | 918 |  | 1,889 |  | 1,889 |  | 5,683 |
| 15-May-2021 |  | 1,930 |  | 2,807 |  | 918 |  | 1,889 |  | 3,819 |  |  |
| 15-Nov-2021 |  |  |  | 2,767 |  | 904 |  | 1,863 |  | 1,863 |  | 5,682 |
| 15-May-2022 |  | 1,985 |  | 2,767 |  | 904 |  | 1,863 |  | 3,848 |  |  |
| 15-Nov-2022 |  |  |  | 2,723 |  | 890 |  | 1,833 |  | 1,833 |  | 5,681 |
| 15-May-2023 |  | 2,040 |  | 2,723 |  | 890 |  | 1,833 |  | 3,873 |  |  |
| 15-Nov-2023 |  |  |  | 2,676 |  | 875 |  | 1,801 |  | 1,801 |  | 5,674 |
| 15-May-2024 |  | 2,105 |  | 2,676 |  | 875 |  | 1,801 |  | 3,906 |  |  |
| 15-Nov-2024 |  |  |  | 2,624 |  | 858 |  | 1,766 |  | 1,766 |  | 5,672 |
| 15-May-2025 |  | 2,175 |  | 2,624 |  | 858 |  | 1,766 |  | 3,941 |  |  |
| 15-Nov-2025 |  |  |  | 2,569 |  | 840 |  | 1,729 |  | 1,729 |  | 5,670 |
| 15-May-2026 |  | 2,255 |  | 2,569 |  | 840 |  | 1,729 |  | 3,984 |  |  |
| 15-Nov-2026 |  |  |  | 2,499 |  | 817 |  | 1,682 |  | 1,682 |  | 5,666 |
| 15-May-2027 |  | 2,350 |  | 2,499 |  | 817 |  | 1,682 |  | 4,032 |  |  |
| 15-Nov-2027 |  |  |  | 2,427 |  | 793 |  | 1,634 |  | 1,634 |  | 5,666 |
| 15-May-2028 |  | 2,445 |  | 2,427 |  | 793 |  | 1,634 |  | 4,079 |  |  |
| 15-Nov-2028 |  |  |  | 2,351 |  | 769 |  | 1,582 |  | 1,582 |  | 5,661 |
| 15-May-2029 |  | 2,545 |  | 2,351 |  | 769 |  | 1,582 |  | 4,127 |  |  |
| 15-Nov-2029 |  |  |  | 2,273 |  | 743 |  | 1,530 |  | 1,530 |  | 5,657 |
| 15-May-2030 |  | 2,650 |  | 2,273 |  | 743 |  | 1,530 |  | 4,180 |  |  |
| 15-Nov-2030 |  |  |  | 2,191 |  | 716 |  | 1,475 |  | 1,475 |  | 5,655 |
| 15-May-2031 |  | 2,760 |  | 2,191 |  | 716 |  | 1,475 |  | 4,235 |  |  |
| 15-Nov-2031 |  |  |  | 2,106 |  | 688 |  | 1,418 |  | 1,418 |  | 5,653 |
| 15-May-2032 |  | 2,870 |  | 2,106 |  | 688 |  | 1,418 |  | 4,288 |  |  |
| 15-Nov-2032 |  |  |  | 2,017 |  | 659 |  | 1,358 |  | 1,358 |  | 5,646 |
| 15-May-2033 |  | 2,990 |  | 2,017 |  | 659 |  | 1,358 |  | 4,348 |  |  |
| 15-Nov-2033 |  |  |  | 1,924 |  | 629 |  | 1,295 |  | 1,295 |  | 5,643 |
| 15-May-2034 |  | 33,560 |  | 1,924 |  | 629 |  | 1,295 |  | 34,855 |  |  |
| 15-Nov-2034 |  |  |  | 881 |  | 288 |  | 593 |  | 593 |  | 35,448 |
| 15-May-2035 |  | 4,495 |  | 881 |  | 288 |  | 593 |  | 5,088 |  |  |
| 15-Nov-2035 |  |  |  | 748 |  | 244 |  | 504 |  | 504 |  | 5,592 |
| 15-May-2036 |  | 4,670 |  | 748 |  | 244 |  | 504 |  | 5,174 |  |  |
| 15-Nov-2036 |  |  |  | 609 |  | 199 |  | 410 |  | 410 |  | 5,584 |
| 15-May-2037 |  | 4,855 |  | 609 |  | 199 |  | 410 |  | 5,265 |  |  |
| 15-Nov-2037 |  |  |  | 466 |  | 152 |  | 314 |  | 314 |  | 5,579 |
| 15-May-2038 |  | 5,045 |  | 466 |  | 152 |  | 314 |  | 5,359 |  |  |
| 15-Nov-2038 |  |  |  | 316 |  | 103 |  | 213 |  | 213 |  | 5,572 |
| 15-May-2039 |  | 5,240 |  | 316 |  | 103 |  | 213 |  | 5,453 |  |  |
| 15-Nov-2039 |  |  |  | 161 |  | 53 |  | 108 |  | 108 |  | 5,561 |
| 15-May-2040 |  | 5,445 |  | 161 |  | 53 |  | 108 |  | 5,553 |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 5,553 |
|  | \$ | 99,905 | \$ | 88,628 | \$ | 28,970 | \$ | 59,658 | \$ | 159,563 | \$ | 159,563 |

[^16]
# San Antonio Water System 

WATER SYSTEM REVENUE REFUNDING BONDS
SERIES 2011
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 2,855 | \$ | 828 | \$ | 3,683 | \$ |  |
| 15-Nov-2018 |  |  |  | 756 |  | 756 |  | 4,439 |
| 15-May-2019 |  | 2,935 |  | 756 |  | 3,691 |  |  |
| 15-Nov-2019 |  |  |  | 696 |  | 696 |  | 4,387 |
| 15-May-2020 |  | 3,295 |  | 696 |  | 3,991 |  |  |
| 15-Nov-2020 |  |  |  | 614 |  | 614 |  | 4,605 |
| 15-May-2021 |  | 3,505 |  | 614 |  | 4,119 |  |  |
| 15-Nov-2021 |  |  |  | 526 |  | 526 |  | 4,645 |
| 15-May-2022 |  | 3,720 |  | 526 |  | 4,246 |  |  |
| 15-Nov-2022 |  |  |  | 433 |  | 433 |  | 4,679 |
| 15-May-2023 |  | 3,950 |  | 433 |  | 4,383 |  |  |
| 15-Nov-2023 |  |  |  | 335 |  | 335 |  | 4,718 |
| 15-May-2024 |  | 4,195 |  | 335 |  | 4,530 |  |  |
| 15-Nov-2024 |  |  |  | 230 |  | 230 |  | 4,760 |
| 15-May-2025 |  | 4,455 |  | 230 |  | 4,685 |  |  |
| 15-Nov-2025 |  |  |  | 118 |  | 118 |  | 4,803 |
| 15-May-2026 |  | 4,735 |  | 118 |  | 4,853 |  |  |
|  |  |  |  |  |  |  |  | 4,853 |
|  | \$ | 33,645 | \$ | 8,244 | \$ | 41,889 | \$ | 41,889 |

WATER SYSTEM REVENUE REFUNDING BONDS
SERIES 2011A
(amounts in thousands)

|  | Principal |  | Interest |  | Total SemiAnnual Payment |  | Total Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 2,150 | \$ | 3,747 | \$ | 5,897 | \$ |  |
| 15-Nov-2018 |  |  |  | 3,699 |  | 3,699 |  | 9,596 |
| 15-May-2019 |  | 3,985 |  | 3,699 |  | 7,684 |  |  |
| 15-Nov-2019 |  |  |  | 3,619 |  | 3,619 |  | 11,303 |
| 15-May-2020 |  | 5,400 |  | 3,619 |  | 9,019 |  |  |
| 15-Nov-2020 |  |  |  | 3,503 |  | 3,503 |  | 12,522 |
| 15-May-2021 |  | 6,575 |  | 3,503 |  | 10,078 |  |  |
| 15-Nov-2021 |  |  |  | 3,347 |  | 3,347 |  | 13,425 |
| 15-May-2022 |  | 6,730 |  | 3,347 |  | 10,077 |  |  |
| 15-Nov-2022 |  |  |  | 3,179 |  | 3,179 |  | 13,256 |
| 15-May-2023 |  | 7,890 |  | 3,179 |  | 11,069 |  |  |
| 15-Nov-2023 |  |  |  | 2,982 |  | 2,982 |  | 14,051 |
| 15-May-2024 |  | 8,490 |  | 2,982 |  | 11,472 |  |  |
| 15-Nov-2024 |  |  |  | 2,770 |  | 2,770 |  | 14,242 |
| 15-May-2025 |  | 8,930 |  | 2,770 |  | 11,700 |  |  |
| 15-Nov-2025 |  |  |  | 2,546 |  | 2,546 |  | 14,246 |
| 15-May-2026 |  | 9,370 |  | 2,546 |  | 11,916 |  |  |
| 15-Nov-2026 |  |  |  | 2,312 |  | 2,312 |  | 14,228 |
| 15-May-2027 |  | 12,585 |  | 2,312 |  | 14,897 |  |  |
| 15-Nov-2027 |  |  |  | 2,015 |  | 2,015 |  | 16,912 |
| 15-May-2028 |  | 14,445 |  | 2,015 |  | 16,460 |  |  |
| 15-Nov-2028 |  |  |  | 1,654 |  | 1,654 |  | 18,114 |
| 15-May-2029 |  | 8,990 |  | 1,654 |  | 10,644 |  |  |
| 15-Nov-2029 |  |  |  | 1,429 |  | 1,429 |  | 12,073 |
| 15-May-2030 |  | 9,450 |  | 1,429 |  | 10,879 |  |  |
| 15-Nov-2030 |  |  |  | 1,193 |  | 1,193 |  | 12,072 |
| 15-May-2031 |  | 9,935 |  | 1,193 |  | 11,128 |  |  |
| 15-Nov-2031 |  |  |  | 944 |  | 944 |  | 12,072 |
| 15-May-2032 |  | 10,445 |  | 944 |  | 11,389 |  |  |
| 15-Nov-2032 |  |  |  | 683 |  | 683 |  | 12,072 |
| 15-May-2033 |  | 2,465 |  | 683 |  | 3,148 |  |  |
| 15-Nov-2033 |  |  |  | 622 |  | 622 |  | 3,770 |
| 15-May-2034 |  | 2,590 |  | 622 |  | 3,212 |  |  |
| 15-Nov-2034 |  |  |  | 557 |  | 557 |  | 3,769 |
| 15-May-2035 |  | 2,725 |  | 557 |  | 3,282 |  |  |
| 15-Nov-2035 |  |  |  | 489 |  | 489 |  | 3,771 |
| 15-May-2036 |  | 2,865 |  | 489 |  | 3,354 |  |  |
| 15-Nov-2036 |  |  |  | 417 |  | 417 |  | 3,771 |
| 15-May-2037 |  | 3,010 |  | 417 |  | 3,427 |  |  |
| 15-Nov-2037 |  |  |  | 342 |  | 342 |  | 3,769 |
| 15-May-2038 |  | 3,165 |  | 342 |  | 3,507 |  |  |
| 15-Nov-2038 |  |  |  | 263 |  | 263 |  | 3,770 |
| 15-May-2039 |  | 3,330 |  | 263 |  | 3,593 |  |  |
| 15-Nov-2039 |  |  |  | 180 |  | 180 |  | 3,773 |
| 15-May-2040 |  | 3,500 |  | 180 |  | 3,680 |  |  |
| 15-Nov-2040 |  |  |  | 92 |  | 92 |  | 3,772 |
| 15-May-2041 |  | 3,680 |  | 92 |  | 3,772 |  |  |
|  |  |  |  |  |  |  |  | 3,772 |
|  | \$ | 152,700 | \$ | 81,421 | \$ | 234,121 | \$ | 234,121 |
|  |  |  |  | 177 |  |  |  |  |

# San Antonio Water System 

WATER SYSTEM REVENUE REFUNDING BONDS
SERIES 2012
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 7,360 | \$ | 4,920 | \$ | 12,280 | \$ |  |
| 15-Nov-2018 |  |  |  | 4,773 |  | 4,773 |  | 17,053 |
| 15-May-2019 |  | 4,345 |  | 4,773 |  | 9,118 |  |  |
| 15-Nov-2019 |  |  |  | 4,686 |  | 4,686 |  | 13,804 |
| 15-May-2020 |  | 12,910 |  | 4,686 |  | 17,596 |  |  |
| 15-Nov-2020 |  |  |  | 4,363 |  | 4,363 |  | 21,959 |
| 15-May-2021 |  | 13,510 |  | 4,363 |  | 17,873 |  |  |
| 15-Nov-2021 |  |  |  | 4,025 |  | 4,025 |  | 21,898 |
| 15-May-2022 |  | 16,050 |  | 4,025 |  | 20,075 |  |  |
| 15-Nov-2022 |  |  |  | 3,624 |  | 3,624 |  | 23,699 |
| 15-May-2023 |  | 16,840 |  | 3,624 |  | 20,464 |  |  |
| 15-Nov-2023 |  |  |  | 3,203 |  | 3,203 |  | 23,667 |
| 15-May-2024 |  | 17,675 |  | 3,203 |  | 20,878 |  |  |
| 15-Nov-2024 |  |  |  | 2,761 |  | 2,761 |  | 23,639 |
| 15-May-2025 |  | 18,540 |  | 2,761 |  | 21,301 |  |  |
| 15-Nov-2025 |  |  |  | 2,298 |  | 2,298 |  | 23,599 |
| 15-May-2026 |  | 19,450 |  | 2,298 |  | 21,748 |  |  |
| 15-Nov-2026 |  |  |  | 1,812 |  | 1,812 |  | 23,560 |
| 15-May-2027 |  | 39,450 |  | 1,812 |  | 41,262 |  |  |
| 15-Nov-2027 |  |  |  | 825 |  | 825 |  | 42,087 |
| 15-May-2028 |  | 41,265 |  | 825 |  | 42,090 |  |  |
|  |  |  |  |  |  |  |  | 42,090 |
|  | \$ | 207,395 | \$ | 69,660 | \$ | 277,055 | \$ | 277,055 |

San Antonio Water System
WATER SYSTEM REVENUE AND REFUNDING BONDS
SERIES 2012A
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total Semi- <br> Annual Payment |  | $\begin{gathered} \text { Total } \\ \text { Annual Payment } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 3,180 | \$ | 3,498 | \$ | 6,678 | \$ |  |
| 15-Nov-2018 |  |  |  | 3,419 |  | 3,419 |  | 10,097 |
| 15-May-2019 |  | 3,345 |  | 3,419 |  | 6,764 |  |  |
| 15-Nov-2019 |  |  |  | 3,335 |  | 3,335 |  | 10,099 |
| 15-May-2020 |  | 3,500 |  | 3,335 |  | 6,835 |  |  |
| 15-Nov-2020 |  |  |  | 3,265 |  | 3,265 |  | 10,100 |
| 15-May-2021 |  | 3,660 |  | 3,265 |  | 6,925 |  |  |
| 15-Nov-2021 |  |  |  | 3,173 |  | 3,173 |  | 10,098 |
| 15-May-2022 |  | 3,850 |  | 3,173 |  | 7,023 |  |  |
| 15-Nov-2022 |  |  |  | 3,077 |  | 3,077 |  | 10,100 |
| 15-May-2023 |  | 4,045 |  | 3,077 |  | 7,122 |  |  |
| 15-Nov-2023 |  |  |  | 2,976 |  | 2,976 |  | 10,098 |
| 15-May-2024 |  | 4,255 |  | 2,976 |  | 7,231 |  |  |
| 15-Nov-2024 |  |  |  | 2,870 |  | 2,870 |  | 10,101 |
| 15-May-2025 |  | 4,470 |  | 2,870 |  | 7,340 |  |  |
| 15-Nov-2025 |  |  |  | 2,758 |  | 2,758 |  | 10,098 |
| 15-May-2026 |  | 4,700 |  | 2,758 |  | 7,458 |  |  |
| 15-Nov-2026 |  |  |  | 2,640 |  | 2,640 |  | 10,098 |
| 15-May-2027 |  | 4,940 |  | 2,640 |  | 7,580 |  |  |
| 15-Nov-2027 |  |  |  | 2,517 |  | 2,517 |  | 10,097 |
| 15-May-2028 |  | 5,195 |  | 2,517 |  | 7,712 |  |  |
| 15-Nov-2028 |  |  |  | 2,387 |  | 2,387 |  | 10,099 |
| 15-May-2029 |  | 5,460 |  | 2,387 |  | 7,847 |  |  |
| 15-Nov-2029 |  |  |  | 2,251 |  | 2,251 |  | 10,098 |
| 15-May-2030 |  | 5,740 |  | 2,251 |  | 7,991 |  |  |
| 15-Nov-2030 |  |  |  | 2,107 |  | 2,107 |  | 10,098 |
| 15-May-2031 |  | 6,035 |  | 2,107 |  | 8,142 |  |  |
| 15-Nov-2031 |  |  |  | 1,956 |  | 1,956 |  | 10,098 |
| 15-May-2032 |  | 6,310 |  | 1,956 |  | 8,266 |  |  |
| 15-Nov-2032 |  |  |  | 1,830 |  | 1,830 |  | 10,096 |
| 15-May-2033 |  | 6,570 |  | 1,830 |  | 8,400 |  |  |
| 15-Nov-2033 |  |  |  | 1,699 |  | 1,699 |  | 10,099 |
| 15-May-2034 |  | 6,840 |  | 1,699 |  | 8,539 |  |  |
| 15-Nov-2034 |  |  |  | 1,562 |  | 1,562 |  | 10,101 |
| 15-May-2035 |  | 7,155 |  | 1,562 |  | 8,717 |  |  |
| 15-Nov-2035 |  |  |  | 1,383 |  | 1,383 |  | 10,100 |
| 15-May-2036 |  | 7,520 |  | 1,383 |  | 8,903 |  |  |
| 15-Nov-2036 |  |  |  | 1,195 |  | 1,195 |  | 10,098 |
| 15-May-2037 |  | 7,905 |  | 1,195 |  | 9,100 |  |  |
| 15-Nov-2037 |  |  |  | 997 |  | 997 |  | 10,097 |
| 15-May-2038 |  | 8,310 |  | 997 |  | 9,307 |  |  |
| 15-Nov-2038 |  |  |  | 790 |  | 790 |  | 10,097 |
| 15-May-2039 |  | 8,740 |  | 790 |  | 9,530 |  |  |
| 15-Nov-2039 |  |  |  | 571 |  | 571 |  | 10,101 |
| 15-May-2040 |  | 9,185 |  | 571 |  | 9,756 |  |  |
| 15-Nov-2040 |  |  |  | 341 |  | 341 |  | 10,097 |
| 15-May-2041 |  | 9,585 |  | 341 |  | 9,926 |  |  |
| 15-Nov-2041 |  |  |  | 174 |  | 174 |  | 10,100 |
| 15-May-2042 |  | 9,925 |  | 174 |  | 10,099 |  |  |
|  |  |  |  |  |  |  |  | 10,099 |
|  | \$ | 150,420 | \$ | 102,044 | \$ | 252,464 | \$ | 52,464 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE BONDS
TOTAL DEBT SERVICE TO MATURITY
(amounts in thousands)

Principal

|  |  | Principal |  | Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  | Total Debt Outstanding |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01-May-2018 | \$ |  | \$ | 1,984 | \$ | 1,984 | \$ |  | \$ |  |
| 15-May-2018 |  | 61,155 |  | 31,764 |  | 92,919 |  |  |  |  |
| 01-Nov-2018 |  |  |  | 1,984 |  | 1,984 |  |  |  |  |
| 15-Nov-2018 |  |  |  | 30,904 |  | 30,904 |  | 127,791 |  | 1,734,340 |
| 01-May-2019 |  |  |  | 1,984 |  | 1,984 |  |  |  |  |
| 15-May-2019 |  | 66,495 |  | 30,904 |  | 97,399 |  |  |  |  |
| 01-Nov-2019 |  |  |  | 1,984 |  | 1,984 |  |  |  |  |
| 15-Nov-2019 |  |  |  | 29,915 |  | 29,915 |  | 131,282 |  | 1,667,845 |
| 01-May-2020 |  |  |  | 1,984 |  | 1,984 |  |  |  |  |
| 15-May-2020 |  | 59,730 |  | 29,915 |  | 89,645 |  |  |  |  |
| 01-Nov-2020 |  |  |  | 1,984 |  | 1,984 |  |  |  |  |
| 15-Nov-2020 |  |  |  | 28,813 |  | 28,813 |  | 122,426 |  | 1,608,115 |
| 01-May-2021 |  |  |  | 1,984 |  | 1,984 |  |  |  |  |
| 15-May-2021 |  | 62,060 |  | 28,813 |  | 90,873 |  |  |  |  |
| 01-Nov-2021 |  |  |  | 1,984 |  | 1,984 |  |  |  |  |
| 15-Nov-2021 |  |  |  | 27,625 |  | 27,625 |  | 122,466 |  | 1,546,055 |
| 01-May-2022 |  |  |  | 2,231 |  | 2,231 |  |  |  |  |
| 15-May-2022 |  | 62,380 |  | 27,625 |  | 90,005 |  |  |  |  |
| 01-Nov-2022 |  |  |  | 2,231 |  | 2,231 |  |  |  |  |
| 15-Nov-2022 |  |  |  | 26,395 |  | 26,395 |  | 120,862 |  | 1,483,675 |
| 01-May-2023 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-May-2023 |  | 58,370 |  | 26,395 |  | 84,765 |  |  |  |  |
| 01-Nov-2023 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-Nov-2023 |  |  |  | 25,257 |  | 25,257 |  | 114,982 |  | 1,425,305 |
| 01-May-2024 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-May-2024 |  | 61,900 |  | 25,257 |  | 87,157 |  |  |  |  |
| 01-Nov-2024 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-Nov-2024 |  |  |  | 24,028 |  | 24,028 |  | 116,145 |  | 1,363,405 |
| 01-May-2025 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-May-2025 |  | 62,425 |  | 24,028 |  | 86,453 |  |  |  |  |
| 01-Nov-2025 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-Nov-2025 |  |  |  | 22,788 |  | 22,788 |  | 114,201 |  | 1,300,980 |
| 01-May-2026 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-May-2026 |  | 62,875 |  | 22,788 |  | 85,663 |  |  |  |  |
| 01-Nov-2026 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-Nov-2026 |  |  |  | 21,518 |  | 21,518 |  | 112,141 |  | 1,238,105 |
| 01-May-2027 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-May-2027 |  | 52,240 |  | 21,518 |  | 73,758 |  |  |  |  |
| 01-Nov-2027 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-Nov-2027 |  |  |  | 20,507 |  | 20,507 |  | 99,225 |  | 1,185,865 |
| 01-May-2028 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-May-2028 |  | 52,010 |  | 20,507 |  | 72,517 |  |  |  |  |
| 01-Nov-2028 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-Nov-2028 |  |  |  | 19,520 |  | 19,520 |  | 96,997 |  | 1,133,855 |
| 01-May-2029 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-May-2029 |  | 68,860 |  | 19,520 |  | 88,380 |  |  |  |  |
| 01-Nov-2029 |  |  |  | 2,480 |  | 2,480 |  |  |  |  |
| 15-Nov-2029 |  |  |  | 18,124 |  | 18,124 |  | 111,464 |  | 1,064,995 |
| 01-May-2030 |  | 6,715 |  | 2,480 |  | 9,195 |  |  |  |  |
| 15-May-2030 |  | 60,685 |  | 18,124 |  | 78,809 |  |  |  |  |
| 01-Nov-2030 |  |  |  | 2,396 |  | 2,396 |  |  |  |  |
| 15-Nov-2030 |  |  |  | 16,926 |  | 16,926 |  | 107,326 |  | 997,595 |
| 01-May-2031 |  | 11,885 |  | 2,396 |  | 14,281 |  |  |  |  |
| 15-May-2031 |  | 58,090 |  | 16,926 |  | 75,016 |  |  |  |  |
| 01-Nov-2031 |  |  |  | 2,247 |  | 2,247 |  |  |  |  |
| 15-Nov-2031 |  |  |  | 15,725 |  | 15,725 |  | 107,269 |  | 927,620 |

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San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE BONDS
TOTAL DEBT SERVICE TO MATURITY
(amounts in thousands)
Page 2 of 2

|  |  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment | Total Debt <br> Outstanding |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01-May-2032 |  | 12,225 |  | 2,247 |  | 14,472 |  |  |  |
| 15-May-2032 |  | 59,145 |  | 15,725 |  | 74,870 |  |  |  |
| 01-Nov-2032 |  |  |  | 2,095 |  | 2,095 |  |  |  |
| 15-Nov-2032 |  |  |  | 14,461 |  | 14,461 |  | 105,898 | 856,250 |
| 01-May-2033 |  | 12,580 |  | 2,095 |  | 14,675 |  |  |  |
| 15-May-2033 |  | 69,905 |  | 14,461 |  | 84,366 |  |  |  |
| 01-Nov-2033 |  |  |  | 1,937 |  | 1,937 |  |  |  |
| 15-Nov-2033 |  |  |  | 12,935 |  | 12,935 |  | 113,913 | 773,765 |
| 01-May-2034 |  | 12,945 |  | 1,937 |  | 14,882 |  |  |  |
| 15-May-2034 |  | 76,095 |  | 12,935 |  | 89,030 |  |  |  |
| 01-Nov-2034 |  |  |  | 1,776 |  | 1,776 |  |  |  |
| 15-Nov-2034 |  |  |  | 11,251 |  | 11,251 |  | 116,939 | 684,725 |
| 01-May-2035 |  | 13,315 |  | 1,776 |  | 15,091 |  |  |  |
| 15-May-2035 |  | 76,650 |  | 11,251 |  | 87,901 |  |  |  |
| 01-Nov-2035 |  |  |  | 1,609 |  | 1,609 |  |  |  |
| 15-Nov-2035 |  |  |  | 9,616 |  | 9,616 |  | 114,217 | 594,760 |
| 01-May-2036 |  | 13,695 |  | 1,609 |  | 15,304 |  |  |  |
| 15-May-2036 |  | 76,390 |  | 9,616 |  | 86,006 |  |  |  |
| 01-Nov-2036 |  |  |  | 1,438 |  | 1,438 |  |  |  |
| 15-Nov-2036 |  |  |  | 7,960 |  | 7,960 |  | 110,708 | 504,675 |
| 01-May-2037 |  | 14,085 |  | 1,438 |  | 15,523 |  |  |  |
| 15-May-2037 |  | 79,575 |  | 7,960 |  | 87,535 |  |  |  |
| 01-Nov-2037 |  |  |  | 1,262 |  | 1,262 |  |  |  |
| 15-Nov-2037 |  |  |  | 6,429 |  | 6,429 |  | 110,749 | 411,015 |
| 01-May-2038 |  | 14,490 |  | 1,262 |  | 15,752 |  |  |  |
| 15-May-2038 |  | 71,975 |  | 6,429 |  | 78,404 |  |  |  |
| 01-Nov-2038 |  |  |  | 1,081 |  | 1,081 |  |  |  |
| 15-Nov-2038 |  |  |  | 4,850 |  | 4,850 |  | 100,087 | 324,550 |
| 01-May-2039 |  | 14,895 |  | 1,081 |  | 15,976 |  |  |  |
| 15-May-2039 |  | 72,330 |  | 4,850 |  | 77,180 |  |  |  |
| 01-Nov-2039 |  |  |  | 894 |  | 894 |  |  |  |
| 15-Nov-2039 |  |  |  | 3,177 |  | 3,177 |  | 97,227 | 237,325 |
| 01-May-2040 |  | 15,310 |  | 894 |  | 16,204 |  |  |  |
| 15-May-2040 |  | 59,940 |  | 3,177 |  | 63,117 |  |  |  |
| 01-Nov-2040 |  |  |  | 703 |  | 703 |  |  |  |
| 15-Nov-2040 |  |  |  | 2,024 |  | 2,024 |  | 82,048 | 162,075 |
| 01-May-2041 |  | 15,745 |  | 703 |  | 16,448 |  |  |  |
| 15-May-2041 |  | 20,500 |  | 2,024 |  | 22,524 |  |  |  |
| 01-Nov-2041 |  |  |  | 506 |  | 506 |  |  |  |
| 15-Nov-2041 |  |  |  | 1,651 |  | 1,651 |  | 41,129 | 125,830 |
| 01-May-2042 |  | 16,185 |  | 506 |  | 16,691 |  |  |  |
| 15-May-2042 |  | 20,295 |  | 1,651 |  | 21,946 |  |  |  |
| 01-Nov-2042 |  |  |  | 304 |  | 304 |  |  |  |
| 15-Nov-2042 |  |  |  | 1,283 |  | 1,283 |  | 40,224 | 89,350 |
| 01-May-2043 |  | 16,630 |  | 304 |  | 16,934 |  |  |  |
| 15-May-2043 |  | 20,230 |  | 1,283 |  | 21,513 |  |  |  |
| 01-Nov-2043 |  |  |  | 96 |  | 96 |  |  |  |
| 15-Nov-2043 |  |  |  | 906 |  | 906 |  | 39,449 | 52,490 |
| 01-May-2044 |  | 7,685 |  | 96 |  | 7,781 |  |  |  |
| 15-May-2044 |  | 17,950 |  | 906 |  | 18,856 |  |  |  |
| 15-Nov-2044 |  |  |  | 565 |  | 565 |  | 27,202 | 26,855 |
| 15-May-2045 |  | 16,905 |  | 565 |  | 17,470 |  |  |  |
| 15-Nov-2045 |  |  |  | 231 |  | 231 |  | 17,701 | 9,950 |
| 15-May-2046 |  | 9,950 |  | 231 |  | 10,181 |  |  |  |
|  |  |  |  |  |  |  |  | 10,181 | - |
|  | \$ | 1,795,495 | \$ | 936,754 | \$ | 2,732,249 | \$ | 2,732,249 |  |

# San Antonio Water System 

## WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS

SERIES 2007
(amounts in thousands)

|  | Principal |  | Interest |  |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 400 | \$ |  | 49 | \$ | 449 | \$ |  |
| 15-Nov-2018 |  |  |  |  | 45 |  | 45 |  | 494 |
| 15-May-2019 |  | 410 |  |  | 45 |  | 455 |  |  |
| 15-Nov-2019 |  |  |  |  | 41 |  | 41 |  | 496 |
| 15-May-2020 |  | 420 |  |  | 41 |  | 461 |  |  |
| 15-Nov-2020 |  |  |  |  | 36 |  | 36 |  | 497 |
| 15-May-2021 |  | 430 |  |  | 36 |  | 466 |  |  |
| 15-Nov-2021 |  |  |  |  | 32 |  | 32 |  | 498 |
| 15-May-2022 |  | 435 |  |  | 32 |  | 467 |  |  |
| 15-Nov-2022 |  |  |  |  | 27 |  | 27 |  | 494 |
| 15-May-2023 |  | 445 |  |  | 27 |  | 472 |  |  |
| 15-Nov-2023 |  |  |  |  | 22 |  | 22 |  | 494 |
| 15-May-2024 |  | 455 |  |  | 22 |  | 477 |  |  |
| 15-Nov-2024 |  |  |  |  | 17 |  | 17 |  | 494 |
| 15-May-2025 |  | 470 |  |  | 17 |  | 487 |  |  |
| 15-Nov-2025 |  |  |  |  | 11 |  | 11 |  | 498 |
| 15-May-2026 |  | 480 |  |  | 11 |  | 491 |  |  |
| 15-Nov-2026 |  |  |  |  | 6 |  | 6 |  | 497 |
| 15-May-2027 |  | 490 |  |  | 6 |  | 496 |  |  |
|  |  |  |  |  |  |  |  |  | 496 |
|  | \$ | 4,435 | \$ |  | 523 | \$ | 4,958 | \$ | 4,958 |

# San Antonio Water System 

WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2008
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total Semi- <br> Annual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 780 | \$ | 421 | \$ | 1,201 | \$ |  |
| 15-Nov-2018 |  |  |  | 412 |  | 412 |  | 1,613 |
| 15-May-2019 |  | 800 |  | 412 |  | 1,212 |  |  |
| 15-Nov-2019 |  |  |  | 401 |  | 401 |  | 1,613 |
| 15-May-2020 |  | 825 |  | 401 |  | 1,226 |  |  |
| 15-Nov-2020 |  |  |  | 389 |  | 389 |  | 1,615 |
| 15-May-2021 |  | 850 |  | 389 |  | 1,239 |  |  |
| 15-Nov-2021 |  |  |  | 376 |  | 376 |  | 1,615 |
| 15-May-2022 |  | 875 |  | 376 |  | 1,251 |  |  |
| 15-Nov-2022 |  |  |  | 362 |  | 362 |  | 1,613 |
| 15-May-2023 |  | 905 |  | 362 |  | 1,267 |  |  |
| 15-Nov-2023 |  |  |  | 347 |  | 347 |  | 1,614 |
| 15-May-2024 |  | 935 |  | 347 |  | 1,282 |  |  |
| 15-Nov-2024 |  |  |  | 331 |  | 331 |  | 1,613 |
| 15-May-2025 |  | 970 |  | 331 |  | 1,301 |  |  |
| 15-Nov-2025 |  |  |  | 314 |  | 314 |  | 1,615 |
| 15-May-2026 |  | 1,005 |  | 314 |  | 1,319 |  |  |
| 15-Nov-2026 |  |  |  | 296 |  | 296 |  | 1,615 |
| 15-May-2027 |  | 1,040 |  | 296 |  | 1,336 |  |  |
| 15-Nov-2027 |  |  |  | 277 |  | 277 |  | 1,613 |
| 15-May-2028 |  | 1,080 |  | 277 |  | 1,357 |  |  |
| 15-Nov-2028 |  |  |  | 257 |  | 257 |  | 1,614 |
| 15-May-2029 |  | 1,120 |  | 257 |  | 1,377 |  |  |
| 15-Nov-2029 |  |  |  | 236 |  | 236 |  | 1,613 |
| 15-May-2030 |  | 1,165 |  | 236 |  | 1,401 |  |  |
| 15-Nov-2030 |  |  |  | 214 |  | 214 |  | 1,615 |
| 15-May-2031 |  | 1,210 |  | 214 |  | 1,424 |  |  |
| 15-Nov-2031 |  |  |  | 191 |  | 191 |  | 1,615 |
| 15-May-2032 |  | 1,255 |  | 191 |  | 1,446 |  |  |
| 15-Nov-2032 |  |  |  | 167 |  | 167 |  | 1,613 |
| 15-May-2033 |  | 1,305 |  | 167 |  | 1,472 |  |  |
| 15-Nov-2033 |  |  |  | 142 |  | 142 |  | 1,614 |
| 15-May-2034 |  | 1,355 |  | 142 |  | 1,497 |  |  |
| 15-Nov-2034 |  |  |  | 116 |  | 116 |  | 1,613 |
| 15-May-2035 |  | 1,410 |  | 116 |  | 1,526 |  |  |
| 15-Nov-2035 |  |  |  | 89 |  | 89 |  | 1,615 |
| 15-May-2036 |  | 1,465 |  | 89 |  | 1,554 |  |  |
| 15-Nov-2036 |  |  |  | 60 |  | 60 |  | 1,614 |
| 15-May-2037 |  | 1,520 |  | 60 |  | 1,580 |  |  |
| 15-Nov-2037 |  |  |  | 31 |  | 31 |  | 1,611 |
| 15-May-2038 |  | 1,580 |  | 31 |  | 1,611 |  |  |
|  |  |  |  |  |  |  |  | 1,611 |
|  | \$ | 23,450 | \$ | 10,437 | \$ | 33,887 | \$ | 33,887 |

# San Antonio Water System 

WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS
SERIES 2008-A
(amounts in thousands)

|  | Principal |  |  | Interest | Total Semi-Annual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 555 | \$ | 430 | \$ | 985 | \$ |  |
| 15-Nov-2018 |  |  |  | 420 |  | 420 |  | 1,405 |
| 15-May-2019 |  | 580 |  | 420 |  | 1,000 |  |  |
| 15-Nov-2019 |  |  |  | 410 |  | 410 |  | 1,410 |
| 15-May-2020 |  | 600 |  | 410 |  | 1,010 |  |  |
| 15-Nov-2020 |  |  |  | 398 |  | 398 |  | 1,408 |
| 15-May-2021 |  | 625 |  | 398 |  | 1,023 |  |  |
| 15-Nov-2021 |  |  |  | 385 |  | 385 |  | 1,408 |
| 15-May-2022 |  | 650 |  | 385 |  | 1,035 |  |  |
| 15-Nov-2022 |  |  |  | 372 |  | 372 |  | 1,407 |
| 15-May-2023 |  | 680 |  | 372 |  | 1,052 |  |  |
| 15-Nov-2023 |  |  |  | 357 |  | 357 |  | 1,409 |
| 15-May-2024 |  | 710 |  | 357 |  | 1,067 |  |  |
| 15-Nov-2024 |  |  |  | 341 |  | 341 |  | 1,408 |
| 15-May-2025 |  | 740 |  | 341 |  | 1,081 |  |  |
| 15-Nov-2025 |  |  |  | 324 |  | 324 |  | 1,405 |
| 15-May-2026 |  | 775 |  | 324 |  | 1,099 |  |  |
| 15-Nov-2026 |  |  |  | 307 |  | 307 |  | 1,406 |
| 15-May-2027 |  | 815 |  | 307 |  | 1,122 |  |  |
| 15-Nov-2027 |  |  |  | 288 |  | 288 |  | 1,410 |
| 15-May-2028 |  | 850 |  | 288 |  | 1,138 |  |  |
| 15-Nov-2028 |  |  |  | 268 |  | 268 |  | 1,406 |
| 15-May-2029 |  | 890 |  | 268 |  | 1,158 |  |  |
| 15-Nov-2029 |  |  |  | 247 |  | 247 |  | 1,405 |
| 15-May-2030 |  | 935 |  | 247 |  | 1,182 |  |  |
| 15-Nov-2030 |  |  |  | 224 |  | 224 |  | 1,406 |
| 15-May-2031 |  | 980 |  | 224 |  | 1,204 |  |  |
| 15-Nov-2031 |  |  |  | 201 |  | 201 |  | 1,405 |
| 15-May-2032 |  | 1,030 |  | 201 |  | 1,231 |  |  |
| 15-Nov-2032 |  |  |  | 176 |  | 176 |  | 1,407 |
| 15-May-2033 |  | 1,080 |  | 176 |  | 1,256 |  |  |
| 15-Nov-2033 |  |  |  | 150 |  | 150 |  | 1,406 |
| 15-May-2034 |  | 1,135 |  | 150 |  | 1,285 |  |  |
| 15-Nov-2034 |  |  |  | 122 |  | 122 |  | 1,407 |
| 15-May-2035 |  | 1,190 |  | 122 |  | 1,312 |  |  |
| 15-Nov-2035 |  |  |  | 93 |  | 93 |  | 1,405 |
| 15-May-2036 |  | 1,250 |  | 93 |  | 1,343 |  |  |
| 15-Nov-2036 |  |  |  | 63 |  | 63 |  | 1,406 |
| 15-May-2037 |  | 1,315 |  | 63 |  | 1,378 |  |  |
| 15-Nov-2037 |  |  |  | 31 |  | 31 |  | 1,409 |
| 15-May-2038 |  | 1,255 |  | 31 |  | 1,286 |  |  |
|  |  |  |  |  |  |  |  | 1,286 |
|  | \$ | 18,640 | \$ | 10,784 | \$ | 29,424 | \$ | 29,424 |
|  |  |  |  | 184 |  |  |  |  |

## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2009
(amounts in thousands)

|  | Principal |  |  | Interest | Total SemiAnnual Payment |  | $\begin{gathered} \text { Total } \\ \text { Annual Payment } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 1,355 | \$ | 843 | \$ | 2,198 | \$ |  |
| 15-Nov-2018 |  |  |  | 828 |  | 828 |  | 3,026 |
| 15-May-2019 |  | 1,385 |  | 828 |  | 2,213 |  |  |
| 15-Nov-2019 |  |  |  | 812 |  | 812 |  | 3,025 |
| 15-May-2020 |  | 1,420 |  | 812 |  | 2,232 |  |  |
| 15-Nov-2020 |  |  |  | 792 |  | 792 |  | 3,024 |
| 15-May-2021 |  | 1,460 |  | 792 |  | 2,252 |  |  |
| 15-Nov-2021 |  |  |  | 771 |  | 771 |  | 3,023 |
| 15-May-2022 |  | 1,505 |  | 771 |  | 2,276 |  |  |
| 15-Nov-2022 |  |  |  | 747 |  | 747 |  | 3,023 |
| 15-May-2023 |  | 1,555 |  | 747 |  | 2,302 |  |  |
| 15-Nov-2023 |  |  |  | 722 |  | 722 |  | 3,024 |
| 15-May-2024 |  | 1,605 |  | 722 |  | 2,327 |  |  |
| 15-Nov-2024 |  |  |  | 695 |  | 695 |  | 3,022 |
| 15-May-2025 |  | 1,665 |  | 695 |  | 2,360 |  |  |
| 15-Nov-2025 |  |  |  | 664 |  | 664 |  | 3,024 |
| 15-May-2026 |  | 1,730 |  | 664 |  | 2,394 |  |  |
| 15-Nov-2026 |  |  |  | 632 |  | 632 |  | 3,026 |
| 15-May-2027 |  | 1,795 |  | 632 |  | 2,427 |  |  |
| 15-Nov-2027 |  |  |  | 597 |  | 597 |  | 3,024 |
| 15-May-2028 |  | 1,870 |  | 597 |  | 2,467 |  |  |
| 15-Nov-2028 |  |  |  | 559 |  | 559 |  | 3,026 |
| 15-May-2029 |  | 1,945 |  | 559 |  | 2,504 |  |  |
| 15-Nov-2029 |  |  |  | 520 |  | 520 |  | 3,024 |
| 15-May-2030 |  | 2,025 |  | 520 |  | 2,545 |  |  |
| 15-Nov-2030 |  |  |  | 479 |  | 479 |  | 3,024 |
| 15-May-2031 |  | 2,105 |  | 479 |  | 2,584 |  |  |
| 15-Nov-2031 |  |  |  | 436 |  | 436 |  | 3,020 |
| 15-May-2032 |  | 2,200 |  | 436 |  | 2,636 |  |  |
| 15-Nov-2032 |  |  |  | 390 |  | 390 |  | 3,026 |
| 15-May-2033 |  | 2,300 |  | 390 |  | 2,690 |  |  |
| 15-Nov-2033 |  |  |  | 342 |  | 342 |  | 3,032 |
| 15-May-2034 |  | 2,395 |  | 342 |  | 2,737 |  |  |
| 15-Nov-2034 |  |  |  | 291 |  | 291 |  | 3,028 |
| 15-May-2035 |  | 2,500 |  | 291 |  | 2,791 |  |  |
| 15-Nov-2035 |  |  |  | 238 |  | 238 |  | 3,029 |
| 15-May-2036 |  | 2,610 |  | 238 |  | 2,848 |  |  |
| 15-Nov-2036 |  |  |  | 183 |  | 183 |  | 3,031 |
| 15-May-2037 |  | 2,720 |  | 183 |  | 2,903 |  |  |
| 15-Nov-2037 |  |  |  | 125 |  | 125 |  | 3,028 |
| 15-May-2038 |  | 2,840 |  | 125 |  | 2,965 |  |  |
| 15-Nov-2038 |  |  |  | 64 |  | 64 |  | 3,029 |
| 15-May-2039 |  | 2,965 |  | 64 |  | 3,029 |  |  |
|  |  |  |  |  |  |  |  | 3,029 |
|  | \$ | 43,950 | \$ | 22,617 | \$ | 66,567 | \$ | 66,567 |

# San Antonio Water System 

WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS
SERIES 2009A
(amounts in thousands)

|  | Principal |  | Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 2,275 | \$ | 336 | \$ | 2,611 | \$ |  |
| 15-Nov-2018 |  |  |  | 324 |  | 324 |  | 2,935 |
| 15-May-2019 |  | 2,305 |  | 324 |  | 2,629 |  |  |
| 15-Nov-2019 |  |  |  | 308 |  | 308 |  | 2,937 |
| 15-May-2020 |  | 2,340 |  | 308 |  | 2,648 |  |  |
| 15-Nov-2020 |  |  |  | 289 |  | 289 |  | 2,937 |
| 15-May-2021 |  | 2,385 |  | 289 |  | 2,674 |  |  |
| 15-Nov-2021 |  |  |  | 265 |  | 265 |  | 2,939 |
| 15-May-2022 |  | 2,430 |  | 265 |  | 2,695 |  |  |
| 15-Nov-2022 |  |  |  | 240 |  | 240 |  | 2,935 |
| 15-May-2023 |  | 2,485 |  | 240 |  | 2,725 |  |  |
| 15-Nov-2023 |  |  |  | 211 |  | 211 |  | 2,936 |
| 15-May-2024 |  | 2,545 |  | 211 |  | 2,756 |  |  |
| 15-Nov-2024 |  |  |  | 181 |  | 181 |  | 2,937 |
| 15-May-2025 |  | 2,605 |  | 181 |  | 2,786 |  |  |
| 15-Nov-2025 |  |  |  | 148 |  | 148 |  | 2,934 |
| 15-May-2026 |  | 2,675 |  | 148 |  | 2,823 |  |  |
| 15-Nov-2026 |  |  |  | 115 |  | 115 |  | 2,938 |
| 15-May-2027 |  | 2,745 |  | 115 |  | 2,860 |  |  |
| 15-Nov-2027 |  |  |  | 78 |  | 78 |  | 2,938 |
| 15-May-2028 |  | 2,820 |  | 78 |  | 2,898 |  |  |
| 15-Nov-2028 |  |  |  | 41 |  | 41 |  | 2,939 |
| 15-May-2029 |  | 2,895 |  | 41 |  | 2,936 |  |  |
|  |  |  |  |  |  |  |  | 2,936 |
|  | \$ | 30,505 | \$ | 4,736 | \$ | 35,241 | \$ | 35,241 |

# San Antonio Water System <br> WATER SYSTEM JUNIOR LIEN REVENUE REFUNDING BONDS 

SERIES 2010
(amounts in thousands)

|  | Principal |  | Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 7,345 | \$ | 341 | \$ | 7,686 | \$ |  |
| 15-Nov-2018 |  |  |  | 158 |  | 158 |  | 7,844 |
| 15-May-2019 |  | 7,675 |  | 158 |  | 7,833 |  |  |
|  |  |  |  |  |  |  |  | 7,833 |
|  | \$ | 15,020 | \$ | 657 | \$ | 15,677 | \$ | 15,677 |

# San Antonio Water System 

## WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS <br> SERIES 2010A

(amounts in thousands)

|  | Principal |  |  | $\underline{\text { Interest }}$ | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 485 | \$ | 192 | \$ | 677 | \$ |  |
| 15-Nov-2018 |  |  |  | 189 |  | 189 |  | 866 |
| 15-May-2019 |  | 495 |  | 189 |  | 684 |  |  |
| 15-Nov-2019 |  |  |  | 185 |  | 185 |  | 869 |
| 15-May-2020 |  | 500 |  | 185 |  | 685 |  |  |
| 15-Nov-2020 |  |  |  | 181 |  | 181 |  | 866 |
| 15-May-2021 |  | 510 |  | 181 |  | 691 |  |  |
| 15-Nov-2021 |  |  |  | 177 |  | 177 |  | 868 |
| 15-May-2022 |  | 520 |  | 177 |  | 697 |  |  |
| 15-Nov-2022 |  |  |  | 171 |  | 171 |  | 868 |
| 15-May-2023 |  | 530 |  | 171 |  | 701 |  |  |
| 15-Nov-2023 |  |  |  | 166 |  | 166 |  | 867 |
| 15-May-2024 |  | 540 |  | 166 |  | 706 |  |  |
| 15-Nov-2024 |  |  |  | 160 |  | 160 |  | 866 |
| 15-May-2025 |  | 555 |  | 160 |  | 715 |  |  |
| 15-Nov-2025 |  |  |  | 153 |  | 153 |  | 868 |
| 15-May-2026 |  | 565 |  | 153 |  | 718 |  |  |
| 15-Nov-2026 |  |  |  | 146 |  | 146 |  | 864 |
| 15-May-2027 |  | 580 |  | 146 |  | 726 |  |  |
| 15-Nov-2027 |  |  |  | 139 |  | 139 |  | 865 |
| 15-May-2028 |  | 595 |  | 139 |  | 734 |  |  |
| 15-Nov-2028 |  |  |  | 131 |  | 131 |  | 865 |
| 15-May-2029 |  | 615 |  | 131 |  | 746 |  |  |
| 15-Nov-2029 |  |  |  | 123 |  | 123 |  | 869 |
| 15-May-2030 |  | 630 |  | 123 |  | 753 |  |  |
| 15-Nov-2030 |  |  |  | 114 |  | 114 |  | 867 |
| 15-May-2031 |  | 650 |  | 114 |  | 764 |  |  |
| 15-Nov-2031 |  |  |  | 105 |  | 105 |  | 869 |
| 15-May-2032 |  | 665 |  | 105 |  | 770 |  |  |
| 15-Nov-2032 |  |  |  | 95 |  | 95 |  | 865 |
| 15-May-2033 |  | 685 |  | 95 |  | 780 |  |  |
| 15-Nov-2033 |  |  |  | 85 |  | 85 |  | 865 |
| 15-May-2034 |  | 705 |  | 85 |  | 790 |  |  |
| 15-Nov-2034 |  |  |  | 74 |  | 74 |  | 864 |
| 15-May-2035 |  | 730 |  | 74 |  | 804 |  |  |
| 15-Nov-2035 |  |  |  | 63 |  | 63 |  | 867 |
| 15-May-2036 |  | 750 |  | 63 |  | 813 |  |  |
| 15-Nov-2036 |  |  |  | 51 |  | 51 |  | 864 |
| 15-May-2037 |  | 775 |  | 51 |  | 826 |  |  |
| 15-Nov-2037 |  |  |  | 39 |  | 39 |  | 865 |
| 15-May-2038 |  | 800 |  | 39 |  | 839 |  |  |
| 15-Nov-2038 |  |  |  | 27 |  | 27 |  | 866 |
| 15-May-2039 |  | 825 |  | 27 |  | 852 |  |  |
| 15-Nov-2039 |  |  |  | 14 |  | 14 |  | 866 |
| 15-May-2040 |  | 855 |  | 14 |  | 869 |  |  |
|  |  |  |  |  |  |  |  | 869 |
|  | \$ | 14,560 | \$ | 5,368 | \$ | 19,928 | \$ | 19,928 |

## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2011
(amounts in thousands)

|  | Principal |  | Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 1,175 | \$ | 115 | \$ | 1,290 | \$ |  |
| 15-Nov-2018 |  |  |  | 115 |  | 115 |  | 1,405 |
| 15-May-2019 |  | 1,175 |  | 115 |  | 1,290 |  |  |
| 15-Nov-2019 |  |  |  | 113 |  | 113 |  | 1,403 |
| 15-May-2020 |  | 1,180 |  | 113 |  | 1,293 |  |  |
| 15-Nov-2020 |  |  |  | 109 |  | 109 |  | 1,402 |
| 15-May-2021 |  | 1,190 |  | 109 |  | 1,299 |  |  |
| 15-Nov-2021 |  |  |  | 105 |  | 105 |  | 1,404 |
| 15-May-2022 |  | 1,200 |  | 105 |  | 1,305 |  |  |
| 15-Nov-2022 |  |  |  | 99 |  | 99 |  | 1,404 |
| 15-May-2023 |  | 1,215 |  | 99 |  | 1,314 |  |  |
| 15-Nov-2023 |  |  |  | 92 |  | 92 |  | 1,406 |
| 15-May-2024 |  | 1,230 |  | 92 |  | 1,322 |  |  |
| 15-Nov-2024 |  |  |  | 84 |  | 84 |  | 1,406 |
| 15-May-2025 |  | 1,245 |  | 84 |  | 1,329 |  |  |
| 15-Nov-2025 |  |  |  | 74 |  | 74 |  | 1,403 |
| 15-May-2026 |  | 1,265 |  | 74 |  | 1,339 |  |  |
| 15-Nov-2026 |  |  |  | 64 |  | 64 |  | 1,403 |
| 15-May-2027 |  | 1,285 |  | 64 |  | 1,349 |  |  |
| 15-Nov-2027 |  |  |  | 53 |  | 53 |  | 1,402 |
| 15-May-2028 |  | 1,310 |  | 53 |  | 1,363 |  |  |
| 15-Nov-2028 |  |  |  | 41 |  | 41 |  | 1,404 |
| 15-May-2029 |  | 1,335 |  | 41 |  | 1,376 |  |  |
| 15-Nov-2029 |  |  |  | 28 |  | 28 |  | 1,404 |
| 15-May-2030 |  | 1,360 |  | 28 |  | 1,388 |  |  |
| 15-Nov-2030 |  |  |  | 14 |  | 14 |  | 1,402 |
| 15-May-2031 |  | 1,390 |  | 14 |  | 1,404 |  |  |
|  |  |  |  |  |  |  |  | 1,404 |
|  | \$ | 17,555 | \$ | 2,097 | \$ | 19,652 | \$ | 19,652 |

WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS
SERIES 2011A
(amounts in thousands)

|  | Principal |  |  | $\underline{\text { Interest }}$ | Total SemiAnnual Payment |  | Total Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 465 | \$ | 242 | \$ | 707 | \$ |  |
| 15-Nov-2018 |  |  |  | 239 |  | 239 |  | 946 |
| 15-May-2019 |  | 475 |  | 239 |  | 714 |  |  |
| 15-Nov-2019 |  |  |  | 235 |  | 235 |  | 949 |
| 15-May-2020 |  | 480 |  | 235 |  | 715 |  |  |
| 15-Nov-2020 |  |  |  | 231 |  | 231 |  | 946 |
| 15-May-2021 |  | 490 |  | 231 |  | 721 |  |  |
| 15-Nov-2021 |  |  |  | 226 |  | 226 |  | 947 |
| 15-May-2022 |  | 500 |  | 226 |  | 726 |  |  |
| 15-Nov-2022 |  |  |  | 221 |  | 221 |  | 947 |
| 15-May-2023 |  | 510 |  | 221 |  | 731 |  |  |
| 15-Nov-2023 |  |  |  | 214 |  | 214 |  | 945 |
| 15-May-2024 |  | 525 |  | 214 |  | 739 |  |  |
| 15-Nov-2024 |  |  |  | 208 |  | 208 |  | 947 |
| 15-May-2025 |  | 540 |  | 208 |  | 748 |  |  |
| 15-Nov-2025 |  |  |  | 200 |  | 200 |  | 948 |
| 15-May-2026 |  | 555 |  | 200 |  | 755 |  |  |
| 15-Nov-2026 |  |  |  | 192 |  | 192 |  | 947 |
| 15-May-2027 |  | 570 |  | 192 |  | 762 |  |  |
| 15-Nov-2027 |  |  |  | 184 |  | 184 |  | 946 |
| 15-May-2028 |  | 590 |  | 184 |  | 774 |  |  |
| 15-Nov-2028 |  |  |  | 175 |  | 175 |  | 949 |
| 15-May-2029 |  | 605 |  | 175 |  | 780 |  |  |
| 15-Nov-2029 |  |  |  | 166 |  | 166 |  | 946 |
| 15-May-2030 |  | 625 |  | 166 |  | 791 |  |  |
| 15-Nov-2030 |  |  |  | 155 |  | 155 |  | 946 |
| 15-May-2031 |  | 645 |  | 155 |  | 800 |  |  |
| 15-Nov-2031 |  |  |  | 145 |  | 145 |  | 945 |
| 15-May-2032 |  | 670 |  | 145 |  | 815 |  |  |
| 15-Nov-2032 |  |  |  | 133 |  | 133 |  | 948 |
| 15-May-2033 |  | 690 |  | 133 |  | 823 |  |  |
| 15-Nov-2033 |  |  |  | 121 |  | 121 |  | 944 |
| 15-May-2034 |  | 715 |  | 121 |  | 836 |  |  |
| 15-Nov-2034 |  |  |  | 109 |  | 109 |  | 945 |
| 15-May-2035 |  | 745 |  | 109 |  | 854 |  |  |
| 15-Nov-2035 |  |  |  | 95 |  | 95 |  | 949 |
| 15-May-2036 |  | 770 |  | 95 |  | 865 |  |  |
| 15-Nov-2036 |  |  |  | 81 |  | 81 |  | 946 |
| 15-May-2037 |  | 800 |  | 81 |  | 881 |  |  |
| 15-Nov-2037 |  |  |  | 66 |  | 66 |  | 947 |
| 15-May-2038 |  | 830 |  | 66 |  | 896 |  |  |
| 15-Nov-2038 |  |  |  | 51 |  | 51 |  | 947 |
| 15-May-2039 |  | 860 |  | 51 |  | 911 |  |  |
| 15-Nov-2039 |  |  |  | 35 |  | 35 |  | 946 |
| 15-May-2040 |  | 895 |  | 35 |  | 930 |  |  |
| 15-Nov-2040 |  |  |  | 18 |  | 18 |  | 948 |
| 15-May-2041 |  | 930 |  | 18 |  | 948 |  |  |
|  |  |  |  |  |  |  |  | 948 |
|  | \$ | 15,480 | \$ | 7,242 | \$ | 22,722 | \$ | 22,722 |
|  |  |  |  | 190 |  |  |  |  |

## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE REFUNDING BONDS SERIES 2012 (No Reserve Fund)
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 3,290 | \$ | 360 | \$ | 3,650 | \$ |  |
| 15-Nov-2018 |  |  |  | 294 |  | 294 |  | 3,944 |
| 15-May-2019 |  | 4,265 |  | 294 |  | 4,559 |  |  |
| 15-Nov-2019 |  |  |  | 209 |  | 209 |  | 4,768 |
| 15-May-2020 |  | 3,545 |  | 209 |  | 3,754 |  |  |
| 15-Nov-2020 |  |  |  | 129 |  | 129 |  | 3,883 |
| 15-May-2021 |  | 3,735 |  | 129 |  | 3,864 |  |  |
| 15-Nov-2021 |  |  |  | 45 |  | 45 |  | 3,909 |
| 15-May-2022 |  | 1,795 |  | 45 |  | 1,840 |  |  |
|  |  |  |  |  |  | - |  | 1,840 |
|  | \$ | 16,630 | \$ | 1,714 | \$ | 18,344 | \$ | 18,344 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2012
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 590 | \$ | 108 | \$ | 698 | \$ |  |
| 15-Nov-2018 |  |  |  | 108 |  | 108 |  | 806 |
| 15-May-2019 |  | 590 |  | 108 |  | 698 |  |  |
| 15-Nov-2019 |  |  |  | 108 |  | 108 |  | 806 |
| 15-May-2020 |  | 595 |  | 108 |  | 703 |  |  |
| 15-Nov-2020 |  |  |  | 107 |  | 107 |  | 810 |
| 15-May-2021 |  | 595 |  | 107 |  | 702 |  |  |
| 15-Nov-2021 |  |  |  | 105 |  | 105 |  | 807 |
| 15-May-2022 |  | 600 |  | 105 |  | 705 |  |  |
| 15-Nov-2022 |  |  |  | 103 |  | 103 |  | 808 |
| 15-May-2023 |  | 605 |  | 103 |  | 708 |  |  |
| 15-Nov-2023 |  |  |  | 100 |  | 100 |  | 808 |
| 15-May-2024 |  | 610 |  | 100 |  | 710 |  |  |
| 15-Nov-2024 |  |  |  | 98 |  | 98 |  | 808 |
| 15-May-2025 |  | 615 |  | 98 |  | 713 |  |  |
| 15-Nov-2025 |  |  |  | 94 |  | 94 |  | 807 |
| 15-May-2026 |  | 625 |  | 94 |  | 719 |  |  |
| 15-Nov-2026 |  |  |  | 91 |  | 91 |  | 810 |
| 15-May-2027 |  | 630 |  | 91 |  | 721 |  |  |
| 15-Nov-2027 |  |  |  | 87 |  | 87 |  | 808 |
| 15-May-2028 |  | 635 |  | 87 |  | 722 |  |  |
| 15-Nov-2028 |  |  |  | 84 |  | 84 |  | 806 |
| 15-May-2029 |  | 645 |  | 84 |  | 729 |  |  |
| 15-Nov-2029 |  |  |  | 79 |  | 79 |  | 808 |
| 15-May-2030 |  | 655 |  | 79 |  | 734 |  |  |
| 15-Nov-2030 |  |  |  | 75 |  | 75 |  | 809 |
| 15-May-2031 |  | 665 |  | 75 |  | 740 |  |  |
| 15-Nov-2031 |  |  |  | 70 |  | 70 |  | 810 |
| 15-May-2032 |  | 675 |  | 70 |  | 745 |  |  |
| 15-Nov-2032 |  |  |  | 65 |  | 65 |  | 810 |
| 15-May-2033 |  | 685 |  | 65 |  | 750 |  |  |
| 15-Nov-2033 |  |  |  | 60 |  | 60 |  | 810 |
| 15-May-2034 |  | 695 |  | 60 |  | 755 |  |  |
| 15-Nov-2034 |  |  |  | 54 |  | 54 |  | 809 |
| 15-May-2035 |  | 705 |  | 54 |  | 759 |  |  |
| 15-Nov-2035 |  |  |  | 48 |  | 48 |  | 807 |
| 15-May-2036 |  | 720 |  | 48 |  | 768 |  |  |
| 15-Nov-2036 |  |  |  | 42 |  | 42 |  | 810 |
| 15-May-2037 |  | 730 |  | 42 |  | 772 |  |  |
| 15-Nov-2037 |  |  |  | 35 |  | 35 |  | 807 |
| 15-May-2038 |  | 745 |  | 35 |  | 780 |  |  |
| 15-Nov-2038 |  |  |  | 29 |  | 29 |  | 809 |
| 15-May-2039 |  | 760 |  | 29 |  | 789 |  |  |
| 15-Nov-2039 |  |  |  | 22 |  | 22 |  | 811 |
| 15-May-2040 |  | 770 |  | 22 |  | 792 |  |  |
| 15-Nov-2040 |  |  |  | 15 |  | 15 |  | 807 |
| 15-May-2041 |  | 785 |  | 15 |  | 800 |  |  |
| 15-Nov-2041 |  |  |  | 7 |  | 7 |  | 807 |
| 15-May-2042 |  | 800 |  | 7 |  | 807 |  |  |
|  |  |  |  |  |  |  |  | 807 |
|  | \$ | 16,725 | \$ | 3,480 | \$ | 20,205 | \$ | 20,205 |

# San Antonio Water System 

WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2013A
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | $\begin{gathered} \text { Total } \\ \text { Annual Payment } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 2,390 | \$ | 206 | \$ | 2,596 | \$ |  |
| 15-Nov-2018 |  |  |  | 206 |  | 206 |  | 2,802 |
| 15-May-2019 |  | 2,395 |  | 206 |  | 2,601 |  |  |
| 15-Nov-2019 |  |  |  | 205 |  | 205 |  | 2,806 |
| 15-May-2020 |  | 2,400 |  | 205 |  | 2,605 |  |  |
| 15-Nov-2020 |  |  |  | 201 |  | 201 |  | 2,806 |
| 15-May-2021 |  | 2,410 |  | 201 |  | 2,611 |  |  |
| 15-Nov-2021 |  |  |  | 196 |  | 196 |  | 2,807 |
| 15-May-2022 |  | 2,420 |  | 196 |  | 2,616 |  |  |
| 15-Nov-2022 |  |  |  | 187 |  | 187 |  | 2,803 |
| 15-May-2023 |  | 2,440 |  | 187 |  | 2,627 |  |  |
| 15-Nov-2023 |  |  |  | 177 |  | 177 |  | 2,804 |
| 15-May-2024 |  | 2,460 |  | 177 |  | 2,637 |  |  |
| 15-Nov-2024 |  |  |  | 166 |  | 166 |  | 2,803 |
| 15-May-2025 |  | 2,485 |  | 166 |  | 2,651 |  |  |
| 15-Nov-2025 |  |  |  | 153 |  | 153 |  | 2,804 |
| 15-May-2026 |  | 2,515 |  | 153 |  | 2,668 |  |  |
| 15-Nov-2026 |  |  |  | 139 |  | 139 |  | 2,807 |
| 15-May-2027 |  | 2,540 |  | 139 |  | 2,679 |  |  |
| 15-Nov-2027 |  |  |  | 125 |  | 125 |  | 2,804 |
| 15-May-2028 |  | 2,570 |  | 125 |  | 2,695 |  |  |
| 15-Nov-2028 |  |  |  | 109 |  | 109 |  | 2,804 |
| 15-May-2029 |  | 2,605 |  | 109 |  | 2,714 |  |  |
| 15-Nov-2029 |  |  |  | 92 |  | 92 |  | 2,806 |
| 15-May-2030 |  | 2,635 |  | 92 |  | 2,727 |  |  |
| 15-Nov-2030 |  |  |  | 75 |  | 75 |  | 2,802 |
| 15-May-2031 |  | 2,675 |  | 75 |  | 2,750 |  |  |
| 15-Nov-2031 |  |  |  | 56 |  | 56 |  | 2,806 |
| 15-May-2032 |  | 2,720 |  | 56 |  | 2,776 |  |  |
| 15-Nov-2032 |  |  |  | 28 |  | 28 |  | 2,804 |
| 15-May-2033 |  | 2,775 |  | 28 |  | 2,803 |  |  |
|  |  |  |  |  |  | - |  | 2,803 |
|  | \$ | 40,435 | \$ | 4,436 | \$ | 44,871 | \$ | 44,871 |

## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE REFUNDING BONDS
SERIES 2013B (No Reserve Fund)
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 4,200 | \$ | 1,735 | \$ | 5,935 | \$ |  |
| 15-Nov-2018 |  |  |  | 1,630 |  | 1,630 |  | 7,565 |
| 15-May-2019 |  | 4,410 |  | 1,630 |  | 6,040 |  |  |
| 15-Nov-2019 |  |  |  | 1,520 |  | 1,520 |  | 7,560 |
| 15-May-2020 |  | 4,640 |  | 1,520 |  | 6,160 |  |  |
| 15-Nov-2020 |  |  |  | 1,404 |  | 1,404 |  | 7,564 |
| 15-May-2021 |  | 4,875 |  | 1,404 |  | 6,279 |  |  |
| 15-Nov-2021 |  |  |  | 1,282 |  | 1,282 |  | 7,561 |
| 15-May-2022 |  | 5,125 |  | 1,282 |  | 6,407 |  |  |
| 15-Nov-2022 |  |  |  | 1,154 |  | 1,154 |  | 7,561 |
| 15-May-2023 |  | 3,620 |  | 1,154 |  | 4,774 |  |  |
| 15-Nov-2023 |  |  |  | 1,063 |  | 1,063 |  | 5,837 |
| 15-May-2024 |  | 2,970 |  | 1,063 |  | 4,033 |  |  |
| 15-Nov-2024 |  |  |  | 989 |  | 989 |  | 5,022 |
| 15-May-2025 |  | 3,120 |  | 989 |  | 4,109 |  |  |
| 15-Nov-2025 |  |  |  | 911 |  | 911 |  | 5,020 |
| 15-May-2026 |  | 3,285 |  | 911 |  | 4,196 |  |  |
| 15-Nov-2026 |  |  |  | 829 |  | 829 |  | 5,025 |
| 15-May-2027 |  | 3,450 |  | 829 |  | 4,279 |  |  |
| 15-Nov-2027 |  |  |  | 743 |  | 743 |  | 5,022 |
| 15-May-2028 |  | 3,630 |  | 743 |  | 4,373 |  |  |
| 15-Nov-2028 |  |  |  | 652 |  | 652 |  | 5,025 |
| 15-May-2029 |  | 3,815 |  | 652 |  | 4,467 |  |  |
| 15-Nov-2029 |  |  |  | 556 |  | 556 |  | 5,023 |
| 15-May-2030 |  | 4,015 |  | 556 |  | 4,571 |  |  |
| 15-Nov-2030 |  |  |  | 456 |  | 456 |  | 5,027 |
| 15-May-2031 |  | 4,220 |  | 456 |  | 4,676 |  |  |
| 15-Nov-2031 |  |  |  | 351 |  | 351 |  | 5,027 |
| 15-May-2032 |  | 4,440 |  | 351 |  | 4,791 |  |  |
| 15-Nov-2032 |  |  |  | 240 |  | 240 |  | 5,031 |
| 15-May-2033 |  | 4,670 |  | 240 |  | 4,910 |  |  |
| 15-Nov-2033 |  |  |  | 123 |  | 123 |  | 5,033 |
| 15-May-2034 |  | 4,910 |  | 123 |  | 5,033 |  |  |
|  |  |  |  |  |  |  |  | 5,033 |
|  | \$ | 69,395 | \$ | 29,541 | \$ | 98,936 | \$ | 98,936 |

## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2013C
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 1,210 | \$ | 194 | \$ | 1,404 | \$ |  |
| 15-Nov-2018 |  |  |  | 194 |  | 194 |  | 1,598 |
| 15-May-2019 |  | 1,210 |  | 194 |  | 1,404 |  |  |
| 15-Nov-2019 |  |  |  | 191 |  | 191 |  | 1,595 |
| 15-May-2020 |  | 1,220 |  | 191 |  | 1,411 |  |  |
| 15-Nov-2020 |  |  |  | 187 |  | 187 |  | 1,598 |
| 15-May-2021 |  | 1,230 |  | 187 |  | 1,417 |  |  |
| 15-Nov-2021 |  |  |  | 180 |  | 180 |  | 1,597 |
| 15-May-2022 |  | 1,245 |  | 180 |  | 1,425 |  |  |
| 15-Nov-2022 |  |  |  | 172 |  | 172 |  | 1,597 |
| 15-May-2023 |  | 1,260 |  | 172 |  | 1,432 |  |  |
| 15-Nov-2023 |  |  |  | 162 |  | 162 |  | 1,594 |
| 15-May-2024 |  | 1,280 |  | 162 |  | 1,442 |  |  |
| 15-Nov-2024 |  |  |  | 152 |  | 152 |  | 1,594 |
| 15-May-2025 |  | 1,305 |  | 152 |  | 1,457 |  |  |
| 15-Nov-2025 |  |  |  | 140 |  | 140 |  | 1,597 |
| 15-May-2026 |  | 1,330 |  | 140 |  | 1,470 |  |  |
| 15-Nov-2026 |  |  |  | 127 |  | 127 |  | 1,597 |
| 15-May-2027 |  | 1,355 |  | 127 |  | 1,482 |  |  |
| 15-Nov-2027 |  |  |  | 112 |  | 112 |  | 1,594 |
| 15-May-2028 |  | 1,385 |  | 112 |  | 1,497 |  |  |
| 15-Nov-2028 |  |  |  | 97 |  | 97 |  | 1,594 |
| 15-May-2029 |  | 1,420 |  | 97 |  | 1,517 |  |  |
| 15-Nov-2029 |  |  |  | 80 |  | 80 |  | 1,597 |
| 15-May-2030 |  | 1,455 |  | 80 |  | 1,535 |  |  |
| 15-Nov-2030 |  |  |  | 62 |  | 62 |  | 1,597 |
| 15-May-2031 |  | 1,495 |  | 62 |  | 1,557 |  |  |
| 15-Nov-2031 |  |  |  | 42 |  | 42 |  | 1,599 |
| 15-May-2032 |  | 1,535 |  | 42 |  | 1,577 |  |  |
| 15-Nov-2032 |  |  |  | 22 |  | 22 |  | 1,599 |
| 15-May-2033 |  | 1,575 |  | 22 |  | 1,597 |  |  |
|  |  |  |  |  |  |  |  | 1,597 |
|  | \$ | 21,510 | \$ | 4,034 | \$ | 25,544 | \$ | 25,544 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2013D
(amounts in thousands)

|  | Principal |  |  | Interest | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 1,560 | \$ | 723 | \$ | 2,283 | \$ |  |
| 15-Nov-2018 |  |  |  | 720 |  | 720 |  | 3,003 |
| 15-May-2019 |  | 1,565 |  | 720 |  | 2,285 |  |  |
| 15-Nov-2019 |  |  |  | 714 |  | 714 |  | 2,999 |
| 15-May-2020 |  | 1,580 |  | 714 |  | 2,294 |  |  |
| 15-Nov-2020 |  |  |  | 706 |  | 706 |  | 3,000 |
| 15-May-2021 |  | 1,600 |  | 706 |  | 2,306 |  |  |
| 15-Nov-2021 |  |  |  | 695 |  | 695 |  | 3,001 |
| 15-May-2022 |  | 1,625 |  | 695 |  | 2,320 |  |  |
| 15-Nov-2022 |  |  |  | 682 |  | 682 |  | 3,002 |
| 15-May-2023 |  | 1,650 |  | 682 |  | 2,332 |  |  |
| 15-Nov-2023 |  |  |  | 668 |  | 668 |  | 3,000 |
| 15-May-2024 |  | 1,680 |  | 668 |  | 2,348 |  |  |
| 15-Nov-2024 |  |  |  | 651 |  | 651 |  | 2,999 |
| 15-May-2025 |  | 1,715 |  | 651 |  | 2,366 |  |  |
| 15-Nov-2025 |  |  |  | 633 |  | 633 |  | 2,999 |
| 15-May-2026 |  | 1,755 |  | 633 |  | 2,388 |  |  |
| 15-Nov-2026 |  |  |  | 612 |  | 612 |  | 3,000 |
| 15-May-2027 |  | 1,800 |  | 612 |  | 2,412 |  |  |
| 15-Nov-2027 |  |  |  | 590 |  | 590 |  | 3,002 |
| 15-May-2028 |  | 1,845 |  | 590 |  | 2,435 |  |  |
| 15-Nov-2028 |  |  |  | 566 |  | 566 |  | 3,001 |
| 15-May-2029 |  | 1,895 |  | 566 |  | 2,461 |  |  |
| 15-Nov-2029 |  |  |  | 540 |  | 540 |  | 3,001 |
| 15-May-2030 |  | 1,950 |  | 540 |  | 2,490 |  |  |
| 15-Nov-2030 |  |  |  | 513 |  | 513 |  | 3,003 |
| 15-May-2031 |  | 2,005 |  | 513 |  | 2,518 |  |  |
| 15-Nov-2031 |  |  |  | 484 |  | 484 |  | 3,002 |
| 15-May-2032 |  | 2,065 |  | 484 |  | 2,549 |  |  |
| 15-Nov-2032 |  |  |  | 453 |  | 453 |  | 3,002 |
| 15-May-2033 |  | 2,130 |  | 453 |  | 2,583 |  |  |
| 15-Nov-2033 |  |  |  | 421 |  | 421 |  | 3,004 |
| 15-May-2034 |  | 2,195 |  | 421 |  | 2,616 |  |  |
| 15-Nov-2034 |  |  |  | 386 |  | 386 |  | 3,002 |
| 15-May-2035 |  | 2,265 |  | 386 |  | 2,651 |  |  |
| 15-Nov-2035 |  |  |  | 351 |  | 351 |  | 3,002 |
| 15-May-2036 |  | 2,340 |  | 351 |  | 2,691 |  |  |
| 15-Nov-2036 |  |  |  | 313 |  | 313 |  | 3,004 |
| 15-May-2037 |  | 2,415 |  | 313 |  | 2,728 |  |  |
| 15-Nov-2037 |  |  |  | 274 |  | 274 |  | 3,002 |
| 15-May-2038 |  | 2,495 |  | 274 |  | 2,769 |  |  |
| 15-Nov-2038 |  |  |  | 232 |  | 232 |  | 3,001 |
| 15-May-2039 |  | 2,580 |  | 232 |  | 2,812 |  |  |
| 15-Nov-2039 |  |  |  | 189 |  | 189 |  | 3,001 |
| 15-May-2040 |  | 2,665 |  | 189 |  | 2,854 |  |  |
| 15-Nov-2040 |  |  |  | 145 |  | 145 |  | 2,999 |
| 15-May-2041 |  | 2,760 |  | 145 |  | 2,905 |  |  |
| 15-Nov-2041 |  |  |  | 98 |  | 98 |  | 3,003 |
| 15-May-2042 |  | 2,855 |  | 98 |  | 2,953 |  |  |
| 15-Nov-2042 |  |  |  | 50 |  | 50 |  | 3,003 |
| 15-May-2043 |  | 2,950 |  | 50 |  | 3,000 |  |  |
|  |  |  |  |  |  |  |  | 3,000 |
|  | \$ | 53,940 | \$ | 24,095 | \$ | 78,035 | \$ | 78,035 |

## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS
SERIES 2013E (No Reserve Fund)
(amounts in thousands)

|  | Principal |  | Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 3,840 | \$ | 1,576 | \$ | 5,416 | \$ |  |
| 15-Nov-2018 |  |  |  | 1,499 |  | 1,499 |  | 6,915 |
| 15-May-2019 |  | 4,015 |  | 1,499 |  | 5,514 |  |  |
| 15-Nov-2019 |  |  |  | 1,399 |  | 1,399 |  | 6,913 |
| 15-May-2020 |  | 4,200 |  | 1,399 |  | 5,599 |  |  |
| 15-Nov-2020 |  |  |  | 1,315 |  | 1,315 |  | 6,914 |
| 15-May-2021 |  | 4,395 |  | 1,315 |  | 5,710 |  |  |
| 15-Nov-2021 |  |  |  | 1,205 |  | 1,205 |  | 6,915 |
| 15-May-2022 |  | 4,620 |  | 1,205 |  | 5,825 |  |  |
| 15-Nov-2022 |  |  |  | 1,090 |  | 1,090 |  | 6,915 |
| 15-May-2023 |  | 4,855 |  | 1,090 |  | 5,945 |  |  |
| 15-Nov-2023 |  |  |  | 968 |  | 968 |  | 6,913 |
| 15-May-2024 |  | 5,105 |  | 968 |  | 6,073 |  |  |
| 15-Nov-2024 |  |  |  | 841 |  | 841 |  | 6,914 |
| 15-May-2025 |  | 5,365 |  | 841 |  | 6,206 |  |  |
| 15-Nov-2025 |  |  |  | 706 |  | 706 |  | 6,912 |
| 15-May-2026 |  | 5,640 |  | 706 |  | 6,346 |  |  |
| 15-Nov-2026 |  |  |  | 565 |  | 565 |  | 6,911 |
| 15-May-2027 |  | 5,930 |  | 565 |  | 6,495 |  |  |
| 15-Nov-2027 |  |  |  | 417 |  | 417 |  | 6,912 |
| 15-May-2028 |  | 6,235 |  | 417 |  | 6,652 |  |  |
| 15-Nov-2028 |  |  |  | 261 |  | 261 |  | 6,913 |
| 15-May-2029 |  | 6,555 |  | 261 |  | 6,816 |  |  |
| 15-Nov-2029 |  |  |  | 97 |  | 97 |  | 6,913 |
| 15-May-2030 |  | 4,870 |  | 97 |  | 4,967 |  |  |
|  |  |  |  |  |  |  |  | 4,967 |
|  | \$ | 65,625 | \$ | 22,302 | \$ | 87,927 | \$ | 87,927 |

WATER SYSTEM VARIABLE RATE JUNIOR LIEN
REVENUE AND REFUNDING BONDS , SERIES 2013F (No Reserve Fund)*
(amounts in thousands)

|  | Principal |  |  | Interest | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01-May-2018 | \$ | - | \$ | 988 | \$ | 988 | \$ |  |
| 01-Nov-2018 |  |  |  | 988 |  | 988 |  | 1,976 |
| 01-May-2019 |  | - |  | 988 |  | 988 |  |  |
| 01-Nov-2019 |  |  |  | 988 |  | 988 |  | 1,976 |
| 01-May-2020 |  | - |  | 988 |  | 988 |  |  |
| 01-Nov-2020 |  |  |  | 988 |  | 988 |  | 1,976 |
| 01-May-2021 |  | - |  | 988 |  | 988 |  |  |
| 01-Nov-2021 |  |  |  | 988 |  | 988 |  | 1,976 |
| 01-May-2022 |  | - |  | 1,235 |  | 1,235 |  |  |
| 01-Nov-2022 |  |  |  | 1,235 |  | 1,235 |  | 2,470 |
| 01-May-2023 |  | - |  | 1,235 |  | 1,235 |  |  |
| 01-Nov-2023 |  |  |  | 1,235 |  | 1,235 |  | 2,470 |
| 01-May-2024 |  | - |  | 1,235 |  | 1,235 |  |  |
| 01-Nov-2024 |  |  |  | 1,235 |  | 1,235 |  | 2,470 |
| 01-May-2025 |  | - |  | 1,235 |  | 1,235 |  |  |
| 01-Nov-2025 |  |  |  | 1,235 |  | 1,235 |  | 2,470 |
| 01-May-2026 |  | - |  | 1,235 |  | 1,235 |  |  |
| 01-Nov-2026 |  |  |  | 1,235 |  | 1,235 |  | 2,470 |
| 01-May-2027 |  | - |  | 1,235 |  | 1,235 |  |  |
| 01-Nov-2027 |  |  |  | 1,235 |  | 1,235 |  | 2,470 |
| 01-May-2028 |  | - |  | 1,235 |  | 1,235 |  |  |
| 01-Nov-2028 |  |  |  | 1,235 |  | 1,235 |  | 2,470 |
| 01-May-2029 |  | - |  | 1,235 |  | 1,235 |  |  |
| 01-Nov-2029 |  |  |  | 1,235 |  | 1,235 |  | 2,470 |
| 01-May-2030 |  | 1,025 |  | 1,235 |  | 2,260 |  |  |
| 01-Nov-2030 |  |  |  | 1,222 |  | 1,222 |  | 3,482 |
| 01-May-2031 |  | 6,075 |  | 1,222 |  | 7,297 |  |  |
| 01-Nov-2031 |  |  |  | 1,146 |  | 1,146 |  | 8,443 |
| 01-May-2032 |  | 6,290 |  | 1,146 |  | 7,436 |  |  |
| 01-Nov-2032 |  |  |  | 1,068 |  | 1,068 |  | 8,504 |
| 01-May-2033 |  | 6,515 |  | 1,068 |  | 7,583 |  |  |
| 01-Nov-2033 |  |  |  | 986 |  | 986 |  | 8,569 |
| 01-May-2034 |  | 6,745 |  | 986 |  | 7,731 |  |  |
| 01-Nov-2034 |  |  |  | 902 |  | 902 |  | 8,633 |
| 01-May-2035 |  | 6,980 |  | 902 |  | 7,882 |  |  |
| 01-Nov-2035 |  |  |  | 815 |  | 815 |  | 8,697 |
| 01-May-2036 |  | 7,225 |  | 815 |  | 8,040 |  |  |
| 01-Nov-2036 |  |  |  | 724 |  | 724 |  | 8,764 |
| 01-May-2037 |  | 7,475 |  | 724 |  | 8,199 |  |  |
| 01-Nov-2037 |  |  |  | 631 |  | 631 |  | 8,830 |
| 01-May-2038 |  | 7,735 |  | 631 |  | 8,366 |  |  |
| 01-Nov-2038 |  |  |  | 534 |  | 534 |  | 8,900 |
| 01-May-2039 |  | 7,995 |  | 534 |  | 8,529 |  |  |
| 01-Nov-2039 |  |  |  | 434 |  | 434 |  | 8,963 |
| 01-May-2040 |  | 8,260 |  | 434 |  | 8,694 |  |  |
| 01-Nov-2040 |  |  |  | 331 |  | 331 |  | 9,025 |
| 01-May-2041 |  | 8,540 |  | 331 |  | 8,871 |  |  |
| 01-Nov-2041 |  |  |  | 224 |  | 224 |  | 9,095 |
| 01-May-2042 |  | 8,825 |  | 224 |  | 9,049 |  |  |
| 01-Nov-2042 |  |  |  | 114 |  | 114 |  | 9,163 |
| 01-May-2043 |  | 9,110 |  | 114 |  | 9,224 |  |  |
|  |  |  |  |  |  |  |  | 9,224 |
|  | \$ | 98,795 | \$ | 47,161 | \$ | 145,956 | \$ | 145,956 |

[^17]
## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS
SERIES 2014A (No Reserve Fund)
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 3,655 | \$ | 2,286 | \$ | 5,941 | \$ |  |
| 15-Nov-2018 |  |  |  | 2,231 |  | 2,231 |  | 8,172 |
| 15-May-2019 |  | 7,710 |  | 2,231 |  | 9,941 |  |  |
| 15-Nov-2019 |  |  |  | 2,038 |  | 2,038 |  | 11,979 |
| 15-May-2020 |  | 7,960 |  | 2,038 |  | 9,998 |  |  |
| 15-Nov-2020 |  |  |  | 1,839 |  | 1,839 |  | 11,837 |
| 15-May-2021 |  | 8,375 |  | 1,839 |  | 10,214 |  |  |
| 15-Nov-2021 |  |  |  | 1,630 |  | 1,630 |  | 11,844 |
| 15-May-2022 |  | 8,800 |  | 1,630 |  | 10,430 |  |  |
| 15-Nov-2022 |  |  |  | 1,410 |  | 1,410 |  | 11,840 |
| 15-May-2023 |  | 9,265 |  | 1,410 |  | 10,675 |  |  |
| 15-Nov-2023 |  |  |  | 1,178 |  | 1,178 |  | 11,853 |
| 15-May-2024 |  | 9,735 |  | 1,178 |  | 10,913 |  |  |
| 15-Nov-2024 |  |  |  | 935 |  | 935 |  | 11,848 |
| 15-May-2025 |  | 10,235 |  | 935 |  | 11,170 |  |  |
| 15-Nov-2025 |  |  |  | 679 |  | 679 |  | 11,849 |
| 15-May-2026 |  | 10,770 |  | 679 |  | 11,449 |  |  |
| 15-Nov-2026 |  |  |  | 410 |  | 410 |  | 11,859 |
| 15-May-2027 |  | 5,190 |  | 410 |  | 5,600 |  |  |
| 15-Nov-2027 |  |  |  | 280 |  | 280 |  | 5,880 |
| 15-May-2028 |  | 5,455 |  | 280 |  | 5,735 |  |  |
| 15-Nov-2028 |  |  |  | 143 |  | 143 |  | 5,878 |
| 15-May-2029 |  | 5,735 |  | 143 |  | 5,878 |  |  |
|  |  |  |  |  |  |  |  | 5,878 |
|  | \$ | 92,885 | \$ | 27,832 | \$ | 120,717 | \$ | 120,717 |

WATER SYSTEM VARIABLE RATE JUNIOR LIEN
REVENUE AND REFUNDING BONDS , SERIES 2014B (No Reserve Fund)*
(amounts in thousands)

|  | Principal |  |  | $\underline{\text { Interest }}$ | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 01-May-2018 | \$ | - | \$ | 996 | \$ | 996 | \$ |  |
| 01-Nov-2018 |  |  |  | 996 |  | 996 |  | 1,992 |
| 01-May-2019 |  | - |  | 996 |  | 996 |  |  |
| 01-Nov-2019 |  |  |  | 996 |  | 996 |  | 1,992 |
| 01-May-2020 |  | - |  | 996 |  | 996 |  |  |
| 01-Nov-2020 |  |  |  | 996 |  | 996 |  | 1,992 |
| 01-May-2021 |  | - |  | 996 |  | 996 |  |  |
| 01-Nov-2021 |  |  |  | 996 |  | 996 |  | 1,992 |
| 01-May-2022 |  | - |  | 996 |  | 996 |  |  |
| 01-Nov-2022 |  |  |  | 996 |  | 996 |  | 1,992 |
| 01-May-2023 |  | - |  | 1,245 |  | 1,245 |  |  |
| 01-Nov-2023 |  |  |  | 1,245 |  | 1,245 |  | 2,490 |
| 01-May-2024 |  | - |  | 1,245 |  | 1,245 |  |  |
| 01-Nov-2024 |  |  |  | 1,245 |  | 1,245 |  | 2,490 |
| 01-May-2025 |  | - |  | 1,245 |  | 1,245 |  |  |
| 01-Nov-2025 |  |  |  | 1,245 |  | 1,245 |  | 2,490 |
| 01-May-2026 |  | - |  | 1,245 |  | 1,245 |  |  |
| 01-Nov-2026 |  |  |  | 1,245 |  | 1,245 |  | 2,490 |
| 01-May-2027 |  | - |  | 1,245 |  | 1,245 |  |  |
| 01-Nov-2027 |  |  |  | 1,245 |  | 1,245 |  | 2,490 |
| 01-May-2028 |  | - |  | 1,245 |  | 1,245 |  |  |
| 01-Nov-2028 |  |  |  | 1,245 |  | 1,245 |  | 2,490 |
| 01-May-2029 |  | - |  | 1,245 |  | 1,245 |  |  |
| 01-Nov-2029 |  |  |  | 1,245 |  | 1,245 |  | 2,490 |
| 01-May-2030 |  | 5,690 |  | 1,245 |  | 6,935 |  |  |
| 01-Nov-2030 |  |  |  | 1,174 |  | 1,174 |  | 8,109 |
| 01-May-2031 |  | 5,810 |  | 1,174 |  | 6,984 |  |  |
| 01-Nov-2031 |  |  |  | 1,101 |  | 1,101 |  | 8,085 |
| 01-May-2032 |  | 5,935 |  | 1,101 |  | 7,036 |  |  |
| 01-Nov-2032 |  |  |  | 1,027 |  | 1,027 |  | 8,063 |
| 01-May-2033 |  | 6,065 |  | 1,027 |  | 7,092 |  |  |
| 01-Nov-2033 |  |  |  | 951 |  | 951 |  | 8,043 |
| 01-May-2034 |  | 6,200 |  | 951 |  | 7,151 |  |  |
| 01-Nov-2034 |  |  |  | 874 |  | 874 |  | 8,025 |
| 01-May-2035 |  | 6,335 |  | 874 |  | 7,209 |  |  |
| 01-Nov-2035 |  |  |  | 794 |  | 794 |  | 8,003 |
| 01-May-2036 |  | 6,470 |  | 794 |  | 7,264 |  |  |
| 01-Nov-2036 |  |  |  | 714 |  | 714 |  | 7,978 |
| 01-May-2037 |  | 6,610 |  | 714 |  | 7,324 |  |  |
| 01-Nov-2037 |  |  |  | 631 |  | 631 |  | 7,955 |
| 01-May-2038 |  | 6,755 |  | 631 |  | 7,386 |  |  |
| 01-Nov-2038 |  |  |  | 547 |  | 547 |  | 7,933 |
| 01-May-2039 |  | 6,900 |  | 547 |  | 7,447 |  |  |
| 01-Nov-2039 |  |  |  | 460 |  | 460 |  | 7,907 |
| 01-May-2040 |  | 7,050 |  | 460 |  | 7,510 |  |  |
| 01-Nov-2040 |  |  |  | 372 |  | 372 |  | 7,882 |
| 01-May-2041 |  | 7,205 |  | 372 |  | 7,577 |  |  |
| 01-Nov-2041 |  |  |  | 282 |  | 282 |  | 7,859 |
| 01-May-2042 |  | 7,360 |  | 282 |  | 7,642 |  |  |
| 01-Nov-2042 |  |  |  | 190 |  | 190 |  | 7,832 |
| 01-May-2043 |  | 7,520 |  | 190 |  | 7,710 |  |  |
| 01-Nov-2043 |  |  |  | 96 |  | 96 |  | 7,806 |
| 01-May-2044 |  | 7,685 |  | 96 |  | 7,781 |  |  |
|  |  |  |  |  |  |  |  | 7,781 |
|  | \$ | 99,590 | \$ | 47,061 | \$ | 146,651 | \$ | 146,651 |

[^18]
## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2014C
(amounts in thousands)

|  |  | Total Semi- | Total |
| :--- | :---: | :---: | :---: |
| Principal | $\underline{\text { Interest }}$ | $\underline{\text { Annual Payment }}$ | $\underline{\text { Annual Payment }}$ |


| 15-May-2018 | \$ | 1,070 | \$ | 323 | \$ | 1,393 | \$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-Nov-2018 |  |  |  | 323 |  | 323 |  | 1,716 |
| 15-May-2019 |  | 1,070 |  | 323 |  | 1,393 |  |  |
| 15-Nov-2019 |  |  |  | 322 |  | 322 |  | 1,715 |
| 15-May-2020 |  | 1,075 |  | 322 |  | 1,397 |  |  |
| 15-Nov-2020 |  |  |  | 319 |  | 319 |  | 1,716 |
| 15-May-2021 |  | 1,080 |  | 319 |  | 1,399 |  |  |
| 15-Nov-2021 |  |  |  | 315 |  | 315 |  | 1,714 |
| 15-May-2022 |  | 1,090 |  | 315 |  | 1,405 |  |  |
| 15-Nov-2022 |  |  |  | 310 |  | 310 |  | 1,715 |
| 15-May-2023 |  | 1,100 |  | 310 |  | 1,410 |  |  |
| 15-Nov-2023 |  |  |  | 304 |  | 304 |  | 1,714 |
| 15-May-2024 |  | 1,115 |  | 304 |  | 1,419 |  |  |
| 15-Nov-2024 |  |  |  | 297 |  | 297 |  | 1,716 |
| 15-May-2025 |  | 1,130 |  | 297 |  | 1,427 |  |  |
| 15-Nov-2025 |  |  |  | 289 |  | 289 |  | 1,716 |
| 15-May-2026 |  | 1,145 |  | 289 |  | 1,434 |  |  |
| 15-Nov-2026 |  |  |  | 280 |  | 280 |  | 1,714 |
| 15-May-2027 |  | 1,165 |  | 280 |  | 1,445 |  |  |
| 15-Nov-2027 |  |  |  | 270 |  | 270 |  | 1,715 |
| 15-May-2028 |  | 1,185 |  | 270 |  | 1,455 |  |  |
| 15-Nov-2028 |  |  |  | 260 |  | 260 |  | 1,715 |
| 15-May-2029 |  | 1,205 |  | 260 |  | 1,465 |  |  |
| 15-Nov-2029 |  |  |  | 249 |  | 249 |  | 1,714 |
| 15-May-2030 |  | 1,230 |  | 249 |  | 1,479 |  |  |
| 15-Nov-2030 |  |  |  | 237 |  | 237 |  | 1,716 |
| 15-May-2031 |  | 1,250 |  | 237 |  | 1,487 |  |  |
| 15-Nov-2031 |  |  |  | 225 |  | 225 |  | 1,712 |
| 15-May-2032 |  | 1,280 |  | 225 |  | 1,505 |  |  |
| 15-Nov-2032 |  |  |  | 211 |  | 211 |  | 1,716 |
| 15-May-2033 |  | 1,305 |  | 211 |  | 1,516 |  |  |
| 15-Nov-2033 |  |  |  | 197 |  | 197 |  | 1,713 |
| 15-May-2034 |  | 1,335 |  | 197 |  | 1,532 |  |  |
| 15-Nov-2034 |  |  |  | 183 |  | 183 |  | 1,715 |
| 15-May-2035 |  | 1,365 |  | 183 |  | 1,548 |  |  |
| 15-Nov-2035 |  |  |  | 167 |  | 167 |  | 1,715 |
| 15-May-2036 |  | 1,395 |  | 167 |  | 1,562 |  |  |
| 15-Nov-2036 |  |  |  | 151 |  | 151 |  | 1,713 |
| 15-May-2037 |  | 1,430 |  | 151 |  | 1,581 |  |  |
| 15-Nov-2037 |  |  |  | 134 |  | 134 |  | 1,715 |
| 15-May-2038 |  | 1,465 |  | 134 |  | 1,599 |  |  |
| 15-Nov-2038 |  |  |  | 117 |  | 117 |  | 1,716 |
| 15-May-2039 |  | 1,500 |  | 117 |  | 1,617 |  |  |
| 15-Nov-2039 |  |  |  | 99 |  | 99 |  | 1,716 |
| 15-May-2040 |  | 1,535 |  | 99 |  | 1,634 |  |  |
| 15-Nov-2040 |  |  |  | 80 |  | 80 |  | 1,714 |
| 15-May-2041 |  | 1,575 |  | 80 |  | 1,655 |  |  |
| 15-Nov-2041 |  |  |  | 61 |  | 61 |  | 1,716 |
| 15-May-2042 |  | 1,610 |  | 61 |  | 1,671 |  |  |
| 15-Nov-2042 |  |  |  | 41 |  | 41 |  | 1,712 |
| 15-May-2043 |  | 1,650 |  | 41 |  | 1,691 |  |  |
| 15-Nov-2043 |  |  |  | 21 |  | 21 |  | 1,712 |
| 15-May-2044 |  | 1,695 |  | 21 |  | 1,716 |  |  |
|  |  |  |  |  |  | - |  | 1,716 |
|  | \$ | 35,050 | \$ | 11,247 | \$ | 46,297 | \$ | 46,297 |

## San Antonio Water System

WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2014D
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 1,050 | \$ | 117 | \$ | 1,167 | \$ |  |
| 15-Nov-2018 |  |  |  | 117 |  | 117 |  | 1,284 |
| 15-May-2019 |  | 1,055 |  | 117 |  | 1,172 |  |  |
| 15-Nov-2019 |  |  |  | 117 |  | 117 |  | 1,289 |
| 15-May-2020 |  | 1,055 |  | 117 |  | 1,172 |  |  |
| 15-Nov-2020 |  |  |  | 116 |  | 116 |  | 1,288 |
| 15-May-2021 |  | 1,060 |  | 116 |  | 1,176 |  |  |
| 15-Nov-2021 |  |  |  | 113 |  | 113 |  | 1,289 |
| 15-May-2022 |  | 1,065 |  | 113 |  | 1,178 |  |  |
| 15-Nov-2022 |  |  |  | 108 |  | 108 |  | 1,286 |
| 15-May-2023 |  | 1,075 |  | 108 |  | 1,183 |  |  |
| 15-Nov-2023 |  |  |  | 103 |  | 103 |  | 1,286 |
| 15-May-2024 |  | 1,090 |  | 103 |  | 1,193 |  |  |
| 15-Nov-2024 |  |  |  | 97 |  | 97 |  | 1,290 |
| 15-May-2025 |  | 1,100 |  | 97 |  | 1,197 |  |  |
| 15-Nov-2025 |  |  |  | 90 |  | 90 |  | 1,287 |
| 15-May-2026 |  | 1,115 |  | 90 |  | 1,205 |  |  |
| 15-Nov-2026 |  |  |  | 83 |  | 83 |  | 1,288 |
| 15-May-2027 |  | 1,130 |  | 83 |  | 1,213 |  |  |
| 15-Nov-2027 |  |  |  | 74 |  | 74 |  | 1,287 |
| 15-May-2028 |  | 1,145 |  | 74 |  | 1,219 |  |  |
| 15-Nov-2028 |  |  |  | 66 |  | 66 |  | 1,285 |
| 15-May-2029 |  | 1,165 |  | 66 |  | 1,231 |  |  |
| 15-Nov-2029 |  |  |  | 56 |  | 56 |  | 1,287 |
| 15-May-2030 |  | 1,185 |  | 56 |  | 1,241 |  |  |
| 15-Nov-2030 |  |  |  | 46 |  | 46 |  | 1,287 |
| 15-May-2031 |  | 1,205 |  | 46 |  | 1,251 |  |  |
| 15-Nov-2031 |  |  |  | 36 |  | 36 |  | 1,287 |
| 15-May-2032 |  | 1,225 |  | 36 |  | 1,261 |  |  |
| 15-Nov-2032 |  |  |  | 24 |  | 24 |  | 1,285 |
| 15-May-2033 |  | 1,250 |  | 24 |  | 1,274 |  |  |
| 15-Nov-2033 |  |  |  | 12 |  | 12 |  | 1,286 |
| 15-May-2034 |  | 1,275 |  | 12 |  | 1,287 |  |  |
|  |  |  |  |  |  | - |  | 1,287 |
|  | \$ | 19,245 | \$ | 2,633 | \$ | 21,878 | \$ | 21,878 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2015A
(amounts in thousands)

Principal

| 15-May-2018 | \$ | 2,180 | \$ | 518 | \$ | 2,698 | \$ | 3,216 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-Nov-2018 |  |  |  | 518 |  | 518 |  |  |
| 15-May-2019 |  | 2,180 |  | 518 |  | 2,698 |  |  |
| 15-Nov-2019 |  |  |  | 518 |  | 518 |  | 3,216 |
| 15-May-2020 |  | 2,185 |  | 518 |  | 2,703 |  |  |
| 15-Nov-2020 |  |  |  | 514 |  | 514 |  | 3,217 |
| 15-May-2021 |  | 2,195 |  | 514 |  | 2,709 |  |  |
| 15-Nov-2021 |  |  |  | 508 |  | 508 |  | 3,217 |
| 15-May-2022 |  | 2,210 |  | 508 |  | 2,718 |  |  |
| 15-Nov-2022 |  |  |  | 499 |  | 499 |  | 3,217 |
| 15-May-2023 |  | 2,230 |  | 499 |  | 2,729 |  |  |
| 15-Nov-2023 |  |  |  | 489 |  | 489 |  | 3,218 |
| 15-May-2024 |  | 2,250 |  | 489 |  | 2,739 |  |  |
| 15-Nov-2024 |  |  |  | 478 |  | 478 |  | 3,217 |
| 15-May-2025 |  | 2,275 |  | 478 |  | 2,753 |  |  |
| 15-Nov-2025 |  |  |  | 465 |  | 465 |  | 3,218 |
| 15-May-2026 |  | 2,305 |  | 465 |  | 2,770 |  |  |
| 15-Nov-2026 |  |  |  | 450 |  | 450 |  | 3,220 |
| 15-May-2027 |  | 2,330 |  | 450 |  | 2,780 |  |  |
| 15-Nov-2027 |  |  |  | 435 |  | 435 |  | 3,215 |
| 15-May-2028 |  | 2,365 |  | 435 |  | 2,800 |  |  |
| 15-Nov-2028 |  |  |  | 418 |  | 418 |  | 3,218 |
| 15-May-2029 |  | 2,400 |  | 418 |  | 2,818 |  |  |
| 15-Nov-2029 |  |  |  | 401 |  | 401 |  | 3,219 |
| 15-May-2030 |  | 2,435 |  | 401 |  | 2,836 |  |  |
| 15-Nov-2030 |  |  |  | 383 |  | 383 |  | 3,219 |
| 15-May-2031 |  | 2,470 |  | 383 |  | 2,853 |  |  |
| 15-Nov-2031 |  |  |  | 364 |  | 364 |  | 3,217 |
| 15-May-2032 |  | 2,510 |  | 364 |  | 2,874 |  |  |
| 15-Nov-2032 |  |  |  | 344 |  | 344 |  | 3,218 |
| 15-May-2033 |  | 2,550 |  | 344 |  | 2,894 |  |  |
| 15-Nov-2033 |  |  |  | 323 |  | 323 |  | 3,217 |
| 15-May-2034 |  | 2,595 |  | 323 |  | 2,918 |  |  |
| 15-Nov-2034 |  |  |  | 301 |  | 301 |  | 3,219 |
| 15-May-2035 |  | 2,640 |  | 301 |  | 2,941 |  |  |
| 15-Nov-2035 |  |  |  | 278 |  | 278 |  | 3,219 |
| 15-May-2036 |  | 2,685 |  | 278 |  | 2,963 |  |  |
| 15-Nov-2036 |  |  |  | 254 |  | 254 |  | 3,217 |
| 15-May-2037 |  | 2,735 |  | 254 |  | 2,989 |  |  |
| 15-Nov-2037 |  |  |  | 229 |  | 229 |  | 3,218 |
| 15-May-2038 |  | 2,785 |  | 229 |  | 3,014 |  |  |
| 15-Nov-2038 |  |  |  | 204 |  | 204 |  | 3,218 |
| 15-May-2039 |  | 2,835 |  | 204 |  | 3,039 |  |  |
| 15-Nov-2039 |  |  |  | 177 |  | 177 |  | 3,216 |
| 15-May-2040 |  | 2,890 |  | 177 |  | 3,067 |  |  |
| 15-Nov-2040 |  |  |  | 150 |  | 150 |  | 3,217 |
| 15-May-2041 |  | 2,945 |  | 150 |  | 3,095 |  |  |
| 15-Nov-2041 |  |  |  | 121 |  | 121 |  | 3,216 |
| 15-May-2042 |  | 3,005 |  | 121 |  | 3,126 |  |  |
| 15-Nov-2042 |  |  |  | 92 |  | 92 |  | 3,218 |
| 15-May-2043 |  | 3,065 |  | 92 |  | 3,157 |  |  |
| 15-Nov-2043 |  |  |  | 62 |  | 62 |  | 3,219 |
| 15-May-2044 |  | 3,125 |  | 62 |  | 3,187 |  |  |
| 15-Nov-2044 |  |  |  | 31 |  | 31 |  | 3,218 |
| 15-May-2045 |  | 3,185 |  | 31 |  | 3,216 |  |  |
|  |  |  |  |  |  | - |  | 3,216 |
|  | \$ | 71,560 | \$ | 18,530 | \$ | 90,090 | \$ | 90,090 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS
SERIES 2015B
(amounts in thousands)


San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE REFUNDING BONDS
SERIES 2016A
(amounts in thousands)

|  | Principal |  | \$ | $\underline{\text { Interest }}$ | Total Semi- <br> Annual Payment |  | Total Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 5,055 |  | 4,209 | \$ | 9,264 | \$ |  |
| 15-Nov-2018 |  |  |  | 4,082 |  | 4,082 |  | 13,346 |
| 15-May-2019 |  | 3,335 |  | 4,082 |  | 7,417 |  |  |
| 15-Nov-2019 |  |  |  | 3,999 |  | 3,999 |  | 11,416 |
| 15-May-2020 |  | 10,710 |  | 3,999 |  | 14,709 |  |  |
| 15-Nov-2020 |  |  |  | 3,731 |  | 3,731 |  | 18,440 |
| 15-May-2021 |  | 11,255 |  | 3,731 |  | 14,986 |  |  |
| 15-Nov-2021 |  |  |  | 3,456 |  | 3,456 |  | 18,442 |
| 15-May-2022 |  | 11,820 |  | 3,456 |  | 15,276 |  |  |
| 15-Nov-2022 |  |  |  | 3,160 |  | 3,160 |  | 18,436 |
| 15-May-2023 |  | 9,520 |  | 3,160 |  | 12,680 |  |  |
| 15-Nov-2023 |  |  |  | 2,922 |  | 2,922 |  | 15,602 |
| 15-May-2024 |  | 9,995 |  | 2,922 |  | 12,917 |  |  |
| 15-Nov-2024 |  |  |  | 2,673 |  | 2,673 |  | 15,590 |
| 15-May-2025 |  | 10,500 |  | 2,673 |  | 13,173 |  |  |
| 15-Nov-2025 |  |  |  | 2,410 |  | 2,410 |  | 15,583 |
| 15-May-2026 |  | 8,900 |  | 2,410 |  | 11,310 |  |  |
| 15-Nov-2026 |  |  |  | 2,188 |  | 2,188 |  | 13,498 |
| 15-May-2027 |  | 5,970 |  | 2,188 |  | 8,158 |  |  |
| 15-Nov-2027 |  |  |  | 2,038 |  | 2,038 |  | 10,196 |
| 15-May-2028 |  | 1,880 |  | 2,038 |  | 3,918 |  |  |
| 15-Nov-2028 |  |  |  | 1,991 |  | 1,991 |  | 5,909 |
| 15-May-2029 |  | 9,930 |  | 1,991 |  | 11,921 |  |  |
| 15-Nov-2029 |  |  |  | 1,743 |  | 1,743 |  | 13,664 |
| 15-May-2030 |  | 10,425 |  | 1,743 |  | 12,168 |  |  |
| 15-Nov-2030 |  |  |  | 1,482 |  | 1,482 |  | 13,650 |
| 15-May-2031 |  | 16,205 |  | 1,482 |  | 17,687 |  |  |
| 15-Nov-2031 |  |  |  | 1,077 |  | 1,077 |  | 18,764 |
| 15-May-2032 |  | 17,015 |  | 1,077 |  | 18,092 |  |  |
| 15-Nov-2032 |  |  |  | 652 |  | 652 |  | 18,744 |
| 15-May-2033 |  | 5,805 |  | 652 |  | 6,457 |  |  |
| 15-Nov-2033 |  |  |  | 507 |  | 507 |  | 6,964 |
| 15-May-2034 |  | 6,095 |  | 507 |  | 6,602 |  |  |
| 15-Nov-2034 |  |  |  | 354 |  | 354 |  | 6,956 |
| 15-May-2035 |  | 6,350 |  | 354 |  | 6,704 |  |  |
| 15-Nov-2035 |  |  |  | 259 |  | 259 |  | 6,963 |
| 15-May-2036 |  | 2,940 |  | 259 |  | 3,199 |  |  |
| 15-Nov-2036 |  |  |  | 215 |  | 215 |  | 3,414 |
| 15-May-2037 |  | 3,035 |  | 215 |  | 3,250 |  |  |
| 15-Nov-2037 |  |  |  | 168 |  | 168 |  | 3,418 |
| 15-May-2038 |  | 3,160 |  | 168 |  | 3,328 |  |  |
| 15-Nov-2038 |  |  |  | 89 |  | 89 |  | 3,417 |
| 15-May-2039 |  | 3,320 |  | 89 |  | 3,409 |  |  |
| 15-Nov-2039 |  |  |  | 6 |  | 6 |  | 3,415 |
| 15-May-2040 |  | 345 |  | 6 |  | 351 |  |  |
|  |  |  |  |  |  | - |  | 351 |
|  | \$ | 173,565 | \$ | 82,613 | \$ | 256,178 | \$ | 256,178 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE REFUNDING BONDS
TAXABLE SERIES 2016B
(amounts in thousands)

|  | Principal |  | Interest |  | Total Semi-Annual Payment |  | TotalAnnual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 7,960 | \$ | 285 | \$ | 8,245 | \$ |  |
| 15-Nov-2018 |  |  |  | 243 |  | 243 |  | 8,488 |
| 15-May-2019 |  | 6,995 |  | 243 |  | 7,238 |  |  |
| 15-Nov-2019 |  |  |  | 200 |  | 200 |  | 7,438 |
| 15-May-2020 |  | - |  | 200 |  | 200 |  |  |
| 15-Nov-2020 |  |  |  | 200 |  | 200 |  | 400 |
| 15-May-2021 |  | - |  | 200 |  | 200 |  |  |
| 15-Nov-2021 |  |  |  | 200 |  | 200 |  | 400 |
| 15-May-2022 |  | - |  | 200 |  | 200 |  |  |
| 15-Nov-2022 |  |  |  | 200 |  | 200 |  | 400 |
| 15-May-2023 |  | - |  | 200 |  | 200 |  |  |
| 15-Nov-2023 |  |  |  | 200 |  | 200 |  | 400 |
| 15-May-2024 |  | - |  | 200 |  | 200 |  |  |
| 15-Nov-2024 |  |  |  | 200 |  | 200 |  | 400 |
| 15-May-2025 |  | - |  | 200 |  | 200 |  |  |
| 15-Nov-2025 |  |  |  | 200 |  | 200 |  | 400 |
| 15-May-2026 |  | - |  | 200 |  | 200 |  |  |
| 15-Nov-2026 |  |  |  | 200 |  | 200 |  | 400 |
| 15-May-2027 |  | - |  | 200 |  | 200 |  |  |
| 15-Nov-2027 |  |  |  | 200 |  | 200 |  | 400 |
| 15-May-2028 |  | 2,840 |  | 200 |  | 3,040 |  |  |
| 15-Nov-2028 |  |  |  | 157 |  | 157 |  | 3,197 |
| 15-May-2029 |  | 4,885 |  | 157 |  | 5,042 |  |  |
| 15-Nov-2029 |  |  |  | 81 |  | 81 |  | 5,123 |
| 15-May-2030 |  | 5,045 |  | 81 |  | 5,126 |  |  |
|  |  |  |  |  |  | - |  | 5,126 |
|  | \$ | 27,725 | \$ | 4,847 | \$ | 32,572 | \$ | 32,572 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS
SERIES 2016C
(amounts in thousands)

|  | Principal |  | Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | - | \$ | 7,418 | \$ | 7,418 | \$ |  |
| 15-Nov-2018 |  |  |  | 7,418 |  | 7,418 |  | 14,836 |
| 15-May-2019 |  | 3,360 |  | 7,418 |  | 10,778 |  |  |
| 15-Nov-2019 |  |  |  | 7,368 |  | 7,368 |  | 18,146 |
| 15-May-2020 |  | 3,505 |  | 7,368 |  | 10,873 |  |  |
| 15-Nov-2020 |  |  |  | 7,280 |  | 7,280 |  | 18,153 |
| 15-May-2021 |  | 3,685 |  | 7,280 |  | 10,965 |  |  |
| 15-Nov-2021 |  |  |  | 7,188 |  | 7,188 |  | 18,153 |
| 15-May-2022 |  | 3,875 |  | 7,188 |  | 11,063 |  |  |
| 15-Nov-2022 |  |  |  | 7,091 |  | 7,091 |  | 18,154 |
| 15-May-2023 |  | 4,075 |  | 7,091 |  | 11,166 |  |  |
| 15-Nov-2023 |  |  |  | 6,990 |  | 6,990 |  | 18,156 |
| 15-May-2024 |  | 7,290 |  | 6,990 |  | 14,280 |  |  |
| 15-Nov-2024 |  |  |  | 6,807 |  | 6,807 |  | 21,087 |
| 15-May-2025 |  | 7,670 |  | 6,807 |  | 14,477 |  |  |
| 15-Nov-2025 |  |  |  | 6,616 |  | 6,616 |  | 21,093 |
| 15-May-2026 |  | 8,065 |  | 6,616 |  | 14,681 |  |  |
| 15-Nov-2026 |  |  |  | 6,414 |  | 6,414 |  | 21,095 |
| 15-May-2027 |  | 8,470 |  | 6,414 |  | 14,884 |  |  |
| 15-Nov-2027 |  |  |  | 6,202 |  | 6,202 |  | 21,086 |
| 15-May-2028 |  | 8,910 |  | 6,202 |  | 15,112 |  |  |
| 15-Nov-2028 |  |  |  | 5,979 |  | 5,979 |  | 21,091 |
| 15-May-2029 |  | 9,365 |  | 5,979 |  | 15,344 |  |  |
| 15-Nov-2029 |  |  |  | 5,745 |  | 5,745 |  | 21,089 |
| 15-May-2030 |  | 9,845 |  | 5,745 |  | 15,590 |  |  |
| 15-Nov-2030 |  |  |  | 5,499 |  | 5,499 |  | 21,089 |
| 15-May-2031 |  | 10,345 |  | 5,499 |  | 15,844 |  |  |
| 15-Nov-2031 |  |  |  | 5,241 |  | 5,241 |  | 21,085 |
| 15-May-2032 |  | 10,885 |  | 5,241 |  | 16,126 |  |  |
| 15-Nov-2032 |  |  |  | 4,968 |  | 4,968 |  | 21,094 |
| 15-May-2033 |  | 28,635 |  | 4,968 |  | 33,603 |  |  |
| 15-Nov-2033 |  |  |  | 4,253 |  | 4,253 |  | 37,856 |
| 15-May-2034 |  | 35,180 |  | 4,253 |  | 39,433 |  |  |
| 15-Nov-2034 |  |  |  | 3,373 |  | 3,373 |  | 42,806 |
| 15-May-2035 |  | 18,595 |  | 3,373 |  | 21,968 |  |  |
| 15-Nov-2035 |  |  |  | 2,908 |  | 2,908 |  | 24,876 |
| 15-May-2036 |  | 19,555 |  | 2,908 |  | 22,463 |  |  |
| 15-Nov-2036 |  |  |  | 2,419 |  | 2,419 |  | 24,882 |
| 15-May-2037 |  | 20,450 |  | 2,419 |  | 22,869 |  |  |
| 15-Nov-2037 |  |  |  | 2,010 |  | 2,010 |  | 24,879 |
| 15-May-2038 |  | 14,470 |  | 2,010 |  | 16,480 |  |  |
| 15-Nov-2038 |  |  |  | 1,721 |  | 1,721 |  | 18,201 |
| 15-May-2039 |  | 15,140 |  | 1,721 |  | 16,861 |  |  |
| 15-Nov-2039 |  |  |  | 1,342 |  | 1,342 |  | 18,203 |
| 15-May-2040 |  | 6,570 |  | 1,342 |  | 7,912 |  |  |
| 15-Nov-2040 |  |  |  | 1,178 |  | 1,178 |  | 9,090 |
| 15-May-2041 |  | 6,905 |  | 1,178 |  | 8,083 |  |  |
| 15-Nov-2041 |  |  |  | 1,006 |  | 1,006 |  | 9,089 |
| 15-May-2042 |  | 7,260 |  | 1,006 |  | 8,266 |  |  |
| 15-Nov-2042 |  |  |  | 824 |  | 824 |  | 9,090 |
| 15-May-2043 |  | 7,635 |  | 824 |  | 8,459 |  |  |
| 15-Nov-2043 |  |  |  | 633 |  | 633 |  | 9,092 |
| 15-May-2044 |  | 8,025 |  | 633 |  | 8,658 |  |  |
| 15-Nov-2044 |  |  |  | 433 |  | 433 |  | 9,091 |
| 15-May-2045 |  | 8,435 |  | 433 |  | 8,868 |  |  |
| 15-Nov-2045 |  |  |  | 222 |  | 222 |  | 9,090 |
| 15-May-2046 |  | 8,865 |  | 222 |  | 9,087 |  |  |
|  |  |  |  |  |  | - |  | 9,087 |
|  | \$ | 305,065 | \$ | 245,674 | \$ | 550,739 | \$ | 550,739 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2016D
(amounts in thousands)

|  | Principal |  |  | Interest | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 385 | \$ | 62 | \$ | 447 | \$ |  |
| 15-Nov-2018 |  |  |  | 62 |  | 62 |  | 509 |
| 15-May-2019 |  | 385 |  | 62 |  | 447 |  |  |
| 15-Nov-2019 |  |  |  | 62 |  | 62 |  | 509 |
| 15-May-2020 |  | 385 |  | 62 |  | 447 |  |  |
| 15-Nov-2020 |  |  |  | 62 |  | 62 |  | 509 |
| 15-May-2021 |  | 385 |  | 62 |  | 447 |  |  |
| 15-Nov-2021 |  |  |  | 62 |  | 62 |  | 509 |
| 15-May-2022 |  | 385 |  | 62 |  | 447 |  |  |
| 15-Nov-2022 |  |  |  | 62 |  | 62 |  | 509 |
| 15-May-2023 |  | 390 |  | 62 |  | 452 |  |  |
| 15-Nov-2023 |  |  |  | 61 |  | 61 |  | 513 |
| 15-May-2024 |  | 390 |  | 61 |  | 451 |  |  |
| 15-Nov-2024 |  |  |  | 61 |  | 61 |  | 512 |
| 15-May-2025 |  | 390 |  | 61 |  | 451 |  |  |
| 15-Nov-2025 |  |  |  | 60 |  | 60 |  | 511 |
| 15-May-2026 |  | 390 |  | 60 |  | 450 |  |  |
| 15-Nov-2026 |  |  |  | 58 |  | 58 |  | 508 |
| 15-May-2027 |  | 395 |  | 58 |  | 453 |  |  |
| 15-Nov-2027 |  |  |  | 57 |  | 57 |  | 510 |
| 15-May-2028 |  | 400 |  | 57 |  | 457 |  |  |
| 15-Nov-2028 |  |  |  | 55 |  | 55 |  | 512 |
| 15-May-2029 |  | 400 |  | 55 |  | 455 |  |  |
| 15-Nov-2029 |  |  |  | 53 |  | 53 |  | 508 |
| 15-May-2030 |  | 405 |  | 53 |  | 458 |  |  |
| 15-Nov-2030 |  |  |  | 51 |  | 51 |  | 509 |
| 15-May-2031 |  | 410 |  | 51 |  | 461 |  |  |
| 15-Nov-2031 |  |  |  | 49 |  | 49 |  | 510 |
| 15-May-2032 |  | 415 |  | 49 |  | 464 |  |  |
| 15-Nov-2032 |  |  |  | 46 |  | 46 |  | 510 |
| 15-May-2033 |  | 420 |  | 46 |  | 466 |  |  |
| 15-Nov-2033 |  |  |  | 44 |  | 44 |  | 510 |
| 15-May-2034 |  | 425 |  | 44 |  | 469 |  |  |
| 15-Nov-2034 |  |  |  | 41 |  | 41 |  | 510 |
| 15-May-2035 |  | 430 |  | 41 |  | 471 |  |  |
| 15-Nov-2035 |  |  |  | 38 |  | 38 |  | 509 |
| 15-May-2036 |  | 435 |  | 38 |  | 473 |  |  |
| 15-Nov-2036 |  |  |  | 35 |  | 35 |  | 508 |
| 15-May-2037 |  | 440 |  | 35 |  | 475 |  |  |
| 15-Nov-2037 |  |  |  | 32 |  | 32 |  | 507 |
| 15-May-2038 |  | 450 |  | 32 |  | 482 |  |  |
| 15-Nov-2038 |  |  |  | 29 |  | 29 |  | 511 |
| 15-May-2039 |  | 455 |  | 29 |  | 484 |  |  |
| 15-Nov-2039 |  |  |  | 25 |  | 25 |  | 509 |
| 15-May-2040 |  | 460 |  | 25 |  | 485 |  |  |
| 15-Nov-2040 |  |  |  | 22 |  | 22 |  | 507 |
| 15-May-2041 |  | 465 |  | 22 |  | 487 |  |  |
| 15-Nov-2041 |  |  |  | 18 |  | 18 |  | 505 |
| 15-May-2042 |  | 475 |  | 18 |  | 493 |  |  |
| 15-Nov-2042 |  |  |  | 15 |  | 15 |  | 508 |
| 15-May-2043 |  | 480 |  | 15 |  | 495 |  |  |
| 15-Nov-2043 |  |  |  | 11 |  | 11 |  | 506 |
| 15-May-2044 |  | 490 |  | 11 |  | 501 |  |  |
| 15-Nov-2044 |  |  |  | 8 |  | 8 |  | 509 |
| 15-May-2045 |  | 495 |  | 8 |  | 503 |  |  |
| 15-Nov-2045 |  |  |  | 4 |  | 4 |  | 507 |
| 15-May-2046 |  | 505 |  | 4 |  | 509 |  |  |
|  |  |  |  |  |  | - |  | 509 |
|  | \$ | 12,335 | \$ | 2,428 | \$ | 14,763 | \$ | 14,763 |

San Antonio Water System
WATER SYSTEM JUNIOR LIEN REVENUE BONDS
SERIES 2016E
(amounts in thousands)

|  | Principal |  | Interest |  | Total SemiAnnual Payment |  | Total <br> Annual Payment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 440 | \$ | 75 | \$ | 515 | \$ |  |
| 15-Nov-2018 |  |  |  | 75 |  | 75 |  | 590 |
| 15-May-2019 |  | 440 |  | 75 |  | 515 |  |  |
| 15-Nov-2019 |  |  |  | 75 |  | 75 |  | 590 |
| 15-May-2020 |  | 440 |  | 75 |  | 515 |  |  |
| 15-Nov-2020 |  |  |  | 75 |  | 75 |  | 590 |
| 15-May-2021 |  | 440 |  | 75 |  | 515 |  |  |
| 15-Nov-2021 |  |  |  | 75 |  | 75 |  | 590 |
| 15-May-2022 |  | 445 |  | 75 |  | 520 |  |  |
| 15-Nov-2022 |  |  |  | 74 |  | 74 |  | 594 |
| 15-May-2023 |  | 445 |  | 74 |  | 519 |  |  |
| 15-Nov-2023 |  |  |  | 74 |  | 74 |  | 593 |
| 15-May-2024 |  | 445 |  | 74 |  | 519 |  |  |
| 15-Nov-2024 |  |  |  | 73 |  | 73 |  | 592 |
| 15-May-2025 |  | 445 |  | 73 |  | 518 |  |  |
| 15-Nov-2025 |  |  |  | 71 |  | 71 |  | 589 |
| 15-May-2026 |  | 450 |  | 71 |  | 521 |  |  |
| 15-Nov-2026 |  |  |  | 70 |  | 70 |  | 591 |
| 15-May-2027 |  | 450 |  | 70 |  | 520 |  |  |
| 15-Nov-2027 |  |  |  | 68 |  | 68 |  | 588 |
| 15-May-2028 |  | 455 |  | 68 |  | 523 |  |  |
| 15-Nov-2028 |  |  |  | 66 |  | 66 |  | 589 |
| 15-May-2029 |  | 460 |  | 66 |  | 526 |  |  |
| 15-Nov-2029 |  |  |  | 63 |  | 63 |  | 589 |
| 15-May-2030 |  | 465 |  | 63 |  | 528 |  |  |
| 15-Nov-2030 |  |  |  | 61 |  | 61 |  | 589 |
| 15-May-2031 |  | 470 |  | 61 |  | 531 |  |  |
| 15-Nov-2031 |  |  |  | 58 |  | 58 |  | 589 |
| 15-May-2032 |  | 475 |  | 58 |  | 533 |  |  |
| 15-Nov-2032 |  |  |  | 55 |  | 55 |  | 588 |
| 15-May-2033 |  | 480 |  | 55 |  | 535 |  |  |
| 15-Nov-2033 |  |  |  | 52 |  | 52 |  | 587 |
| 15-May-2034 |  | 490 |  | 52 |  | 542 |  |  |
| 15-Nov-2034 |  |  |  | 49 |  | 49 |  | 591 |
| 15-May-2035 |  | 495 |  | 49 |  | 544 |  |  |
| 15-Nov-2035 |  |  |  | 45 |  | 45 |  | 589 |
| 15-May-2036 |  | 500 |  | 45 |  | 545 |  |  |
| 15-Nov-2036 |  |  |  | 42 |  | 42 |  | 587 |
| 15-May-2037 |  | 510 |  | 42 |  | 552 |  |  |
| 15-Nov-2037 |  |  |  | 38 |  | 38 |  | 590 |
| 15-May-2038 |  | 515 |  | 38 |  | 553 |  |  |
| 15-Nov-2038 |  |  |  | 34 |  | 34 |  | 587 |
| 15-May-2039 |  | 525 |  | 34 |  | 559 |  |  |
| 15-Nov-2039 |  |  |  | 30 |  | 30 |  | 589 |
| 15-May-2040 |  | 530 |  | 30 |  | 560 |  |  |
| 15-Nov-2040 |  |  |  | 26 |  | 26 |  | 586 |
| 15-May-2041 |  | 540 |  | 26 |  | 566 |  |  |
| 15-Nov-2041 |  |  |  | 22 |  | 22 |  | 588 |
| 15-May-2042 |  | 550 |  | 22 |  | 572 |  |  |
| 15-Nov-2042 |  |  |  | 18 |  | 18 |  | 590 |
| 15-May-2043 |  | 555 |  | 18 |  | 573 |  |  |
| 15-Nov-2043 |  |  |  | 14 |  | 14 |  | 587 |
| 15-May-2044 |  | 565 |  | 14 |  | 579 |  |  |
| 15-Nov-2044 |  |  |  | 9 |  | 9 |  | 588 |
| 15-May-2045 |  | 575 |  | 9 |  | 584 |  |  |
| 15-Nov-2045 |  |  |  | 5 |  | 5 |  | 589 |
| 15-May-2046 |  | 580 |  | 5 |  | 585 |  |  |
|  |  |  |  |  |  | - |  | 585 |
|  | \$ | 14,175 | \$ | 2,909 | \$ | 17,084 | \$ | 17,084 |

# San Antonio Water System 

WATER SYSTEM JUNIOR LIEN REVENUE AND REFUNDING BONDS
SERIES 2017A
(amounts in thousands)

|  | Principal |  | $\underline{\text { Interest }}$ |  | Total SemiAnnual Payment |  | $\begin{gathered} \text { Total } \\ \text { Annual Payment } \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15-May-2018 | \$ | 4,010 | \$ | 1,954 | \$ | 5,964 | \$ |  |
| 15-Nov-2018 |  |  |  | 1,894 |  | 1,894 |  | 7,858 |
| 15-May-2019 |  | 2,660 |  | 1,894 |  | 4,554 |  |  |
| 15-Nov-2019 |  |  |  | 1,841 |  | 1,841 |  | 6,395 |
| 15-May-2020 |  | 2,780 |  | 1,841 |  | 4,621 |  |  |
| 15-Nov-2020 |  |  |  | 1,771 |  | 1,771 |  | 6,392 |
| 15-May-2021 |  | 2,930 |  | 1,771 |  | 4,701 |  |  |
| 15-Nov-2021 |  |  |  | 1,698 |  | 1,698 |  | 6,399 |
| 15-May-2022 |  | 3,070 |  | 1,698 |  | 4,768 |  |  |
| 15-Nov-2022 |  |  |  | 1,621 |  | 1,621 |  | 6,389 |
| 15-May-2023 |  | 3,235 |  | 1,621 |  | 4,856 |  |  |
| 15-Nov-2023 |  |  |  | 1,541 |  | 1,541 |  | 6,397 |
| 15-May-2024 |  | 3,405 |  | 1,541 |  | 4,946 |  |  |
| 15-Nov-2024 |  |  |  | 1,455 |  | 1,455 |  | 6,401 |
| 15-May-2025 |  | 3,575 |  | 1,455 |  | 5,030 |  |  |
| 15-Nov-2025 |  |  |  | 1,366 |  | 1,366 |  | 6,396 |
| 15-May-2026 |  | 3,760 |  | 1,366 |  | 5,126 |  |  |
| 15-Nov-2026 |  |  |  | 1,272 |  | 1,272 |  | 6,398 |
| 15-May-2027 |  | 250 |  | 1,272 |  | 1,522 |  |  |
| 15-Nov-2027 |  |  |  | 1,267 |  | 1,267 |  | 2,789 |
| 15-May-2028 |  | - |  | 1,267 |  | 1,267 |  |  |
| 15-Nov-2028 |  |  |  | 1,267 |  | 1,267 |  | 2,534 |
| 15-May-2029 |  | 4,910 |  | 1,267 |  | 6,177 |  |  |
| 15-Nov-2029 |  |  |  | 1,144 |  | 1,144 |  | 7,321 |
| 15-May-2030 |  | 5,160 |  | 1,144 |  | 6,304 |  |  |
| 15-Nov-2030 |  |  |  | 1,015 |  | 1,015 |  | 7,319 |
| 15-May-2031 |  | 5,415 |  | 1,015 |  | 6,430 |  |  |
| 15-Nov-2031 |  |  |  | 880 |  | 880 |  | 7,310 |
| 15-May-2032 |  | 5,690 |  | 880 |  | 6,570 |  |  |
| 15-Nov-2032 |  |  |  | 738 |  | 738 |  | 7,308 |
| 15-May-2033 |  | 9,045 |  | 738 |  | 9,783 |  |  |
| 15-Nov-2033 |  |  |  | 512 |  | 512 |  | 10,295 |
| 15-May-2034 |  | 11,945 |  | 512 |  | 12,457 |  |  |
| 15-Nov-2034 |  |  |  | 273 |  | 273 |  | 12,730 |
| 15-May-2035 |  | 3,455 |  | 273 |  | 3,728 |  |  |
| 15-Nov-2035 |  |  |  | 186 |  | 186 |  | 3,914 |
| 15-May-2036 |  | 3,630 |  | 186 |  | 3,816 |  |  |
| 15-Nov-2036 |  |  |  | 96 |  | 96 |  | 3,912 |
| 15-May-2037 |  | 3,820 |  | 96 |  | 3,916 |  |  |
|  |  |  |  |  |  |  |  | 3,916 |
|  | \$ | 82,745 | \$ | 45,628 | \$ | 128,373 | \$ | 128,373 |

# San Antonio Water System <br> <br> REVENUE BOND DEBT COVERAGE RATIO 

 <br> <br> REVENUE BOND DEBT COVERAGE RATIO}

For the Year Ended December 31, 2017
(\$ in thousands)

| Operating Revenues |  |  |
| :--- | ---: | ---: |
| Less Revenues from City Public Service Contract | $\$$ | 666,752 |
| Nonoperating Revenues <br> Less: Federal Subsidy - Build America Bonds <br> Interest on Project Funds | 663,507 |  |

[^19]
[^0]:    Source: Based on rates posted on each respective city's website.
    Note - Most charges are for a 5/8" meter; Arlington, Lubbock, and Plano charges are for a 3/4" meter.
    ${ }^{1}$ Includes Raw Water Pass Through Charge of $\$ 0.992$ per 1,000 gallons.
    ${ }^{2}$ Assumes Standard rates and includes Water Supply Fee.

[^1]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^2]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^3]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options

[^4]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^5]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^6]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^7]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^8]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^9]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^10]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^11]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^12]:    Note: See Analysis of Changes in Bonded Debt for further explanation of call options.

[^13]:    * Interest rate subsidy reduced by sequestration rate of $6.6 \%$ as of federal fiscal year 2018.

[^14]:    * Interest rate subsidy reduced by sequestration rate of $6.6 \%$ as of federal fiscal year 2018.

[^15]:    * Interest rate subsidy reduced by sequestration rate of $6.6 \%$ as of federal fiscal year 2018.

[^16]:    * Interest rate subsidy reduced by sequestration rate of $6.6 \%$ as of federal fiscal year 2018.

[^17]:    * The Water System Junior Lien Revenue Refunding Bonds, Series 2013F (No Reserve Fund) are multimodel variable rate bonds, initially issued in a SIFMA Index Mode, which expired October 31, 2016. On November 1, 2016, the bonds were remarketed into a fixed rate Term Mode for a five-year period ending October 31, 2021 at $2.00 \%$. At the end of the remarketing period, the Bonds will be remarketed or refunded into another term period or will be converted into another mode. Interest listed above is based on $2.00 \%$ through October 31, 2021 and budgeted interest rates thereafter of $2.50 \%$. See Note I for additional information.

[^18]:    * The Water System Junior Lien Revenue and Refunding Bonds, Series 2014B (No Reserve Fund) are multimodel variable rate bonds, initially issued in a SIFMA Index Mode, which expired October 31, 2017. On November 1, 2017, the bonds were remarketed into a fixed rate Term Mode for a five-year period ending October 31, 2022 at $2.00 \%$. At the end of the remarketing period, the Bonds will be remarketed or refunded into another term period or will be converted into another mode. Interest listed above is based on $2.00 \%$ through October 31, 2022 and budgeted interest rates thereafter of $2.50 \%$. See Note I for additional information.

[^19]:    ${ }^{1}$ Annual debt service requirements consist of principal and interest payments net of the U.S. federal interest subsidy on the Series 2009B \& 2010B revenue bonds.

