# ORANGE COUNTY WATER UTILITIES SYSTEM ORANGE COUNTY, FLORIDA ANNUAL FINANCIAL REPORT 

for the years ended September 30, 2018 and 2017

# ORANGE COUNTY WATER UTILITIES SYSTEM <br> ANNUAL FINANCIAL REPORT 

for the years ended September 30, 2018 and 2017

## CONTENTS

PagesReport of Independent Auditor ..... 1-2
Basic Financial Statements:
Statements of Net Position ..... 3
Statements of Revenues, Expenses and Changes in Net Position ..... 4
Statements of Cash Flows ..... 5-6
Notes to Financial Statements ..... 7-41
Supplementary Information:
Schedule of Budgeted Revenues and Expenses Compared to Actual (Non-GAAP Budgetary Basis) ..... 42
Bond and Loan Coverage Computation ..... 43
Customer Statistics (Unaudited) ..... 44

CPAs \& Advisors

## Report of Independent Auditor

To the Honorable County Mayor and Board of County Commissioners of Orange County, Florida:

## Report on the Financial Statements

We have audited the accompanying basic financial statements of the Orange County Water Utilities System of Orange County, Florida (the "System"), an enterprise fund of Orange County, Florida, as of and for the years ended September 30, 2018 and 2017, and the related notes to the financial statements, as listed in the table of contents.

## Management's Responsibility for the Financial Statements

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

## Auditor's Responsibility

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

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

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

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Orange County Water Utilities System of Orange County, Florida as of September 30, 2018 and 2017, and the changes in its financial position and its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.

## Emphasis of Matters

As discussed in Note A to the financial statements, the financial statements referred to above present only the System and do not purport to, and do not, present fairly the financial position of Orange County, Florida, as of September 30, 2018 and 2017, and the changes in its financial position and its cash flows, where applicable, for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.
As discussed in Notes $A$ and $M$ to the financial statements, the Center adopted the provisions of Governmental Accounting Standards Board ("GASB") Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, effective October 1, 2017. Also, as discussed in Note A to the financial statements, the Center early adopted the provisions of GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements, effective October 1, 2016, and GASB Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period, effective October 1, 2017. Our opinion is not modified with respect to these matters.

## Other Matters

Our audit was conducted for the purpose of forming an opinion on the basic financial statements. The Schedule of Budgeted Revenues and Expenses Compared to Actual, the Bond and Loan Coverage Computation and the Customer Statistics are presented for purposes of additional analysis and are 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 Schedule of Budgeted Revenues and Expenses Compared to Actual and the Bond and Loan Coverage Computation have 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 Schedule of Budgeted Revenues and Expenses Compared to Actual and the Bond and Loan Coverage Computation are fairly stated in all material respects in relation to the basic financial statements as a whole. The Customer Statistics has not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on it.

## Other Reporting Required by Government Auditing Standards

As discussed in Note A, the System is administered by the Orange County, Florida Board of County Commissioners, for which, in accordance with Government Auditing Standards, a report is issued which includes our consideration of the System's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with Government Auditing Standards in considering the System's internal control over financial reporting and compliance.

Chang Behort up

Orlando, Florida
February 20, 2019

## ORANGE COUNTY WATER UTILITIES SYSTEM

 STATEMENTS OF NET POSITION September 30, 2018 and 2017| $\underline{2018}$ <br> ASSETS AND DEFERRED OUTFLOWS OF RESOURCES |  |  | $\underline{2017}$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Current assets: |  |  |  |  |
| Cash and cash equivalents | \$ | 119,573,333 | \$ | 116,470,409 |
| Accrued interest receivable |  | 527,484 |  | 454,787 |
| Accounts receivable |  | 22,335,698 |  | 20,604,313 |
| Less allowance for doubtful accounts |  | $(230,457)$ |  | $(202,023)$ |
| Due from other governmental agencies |  | 184,431 |  | 546,602 |
| Inventories and prepaid costs |  | 3,109,789 |  | 3,060,955 |
| Cash and cash equivalents, restricted |  | 43,739,431 |  | 37,547,433 |
| Total current assets |  | 189,239,709 |  | 178,482,476 |
| Noncurrent assets: |  |  |  |  |
| Cash and cash equivalents, restricted |  | 14,313,929 |  | 14,226,466 |
| Accounts receivable |  | 200,595 |  | 401,860 |
| Prepaid costs |  | 5,595,302 |  | 8,569,233 |
| Nondepreciable capital assets |  | 358,536,465 |  | 307,956,843 |
| Depreciable capital assets, net |  | 1,092,382,796 |  | 1,080,323,922 |
| Total noncurrent assets |  | 1,471,029,087 |  | 1,411,478,324 |
| Total assets |  | 1,660,268,796 |  | 1,589,960,800 |
| Deferred outflows of resources: |  |  |  |  |
| Related to pensions and OPEB |  | 15,887,628 |  | 14,989,702 |
| Total assets and deferred outflows of resources | \$ | 1,676,156,424 | \$ | 1,604,950,502 |
| LIABILITIES AND DEFERRED INFLOWS OF RESOURCES |  |  |  |  |
| Current liabilities: |  |  |  |  |
| Accounts payable and accrued liabilities | \$ | 32,966,891 | \$ | 36,492,069 |
| Due to other governmental agencies |  | 477,531 |  | 443,211 |
| Net pension liability |  | 322,654 |  | 343,702 |
| Payable from restricted assets: |  |  |  |  |
| Accrued interest payable |  | 1,722,440 |  | 1,569,479 |
| Loans payable |  | 5,673,151 |  | 2,079,479 |
| Revenue bonds payable |  | 3,265,000 |  | - |
| Customer deposits |  | 10,561,896 |  | 10,138,410 |
| Total current liabilities |  | 54,989,563 |  | 51,066,350 |
| Noncurrent liabilities: |  |  |  |  |
| Compensated absences payable |  | 1,540,394 |  | 1,535,030 |
| Loans payable |  | 88,627,268 |  | 74,312,094 |
| Revenue bonds payable (net of unamortized costs) |  | 88,875,649 |  | 93,158,794 |
| Net pension and OPEB liability |  | 43,144,585 |  | 38,502,153 |
| Total noncurrent liabilities |  | 222,187,896 |  | 207,508,071 |
| Total liabilities |  | 277,177,459 |  | 258,574,421 |
| Deferred inflows of resources: |  |  |  |  |
| Related to pensions and OPEB |  | 4,002,361 |  | 2,188,764 |
| Total liabilities and deferred inflows of resources |  | 281,179,820 |  | 260,763,185 |
| NET POSITION |  |  |  |  |
| Net investment in capital assets |  | 1,248,494,612 |  | 1,200,452,392 |
| Restricted for: |  |  |  |  |
| Debt service |  | 16,113,525 |  | 15,440,115 |
| Operating reserve |  | 26,390,499 |  | 24,625,895 |
| Unrestricted |  | 103,977,968 |  | 103,668,915 |
| Total net position |  | 1,394,976,604 |  | 1,344,187,317 |
| Total liabilities, deferred inflows of resources and net position | \$ | 1,676,156,424 | \$ | 1,604,950,502 |

See accompanying notes to financial statements.

## ORANGE COUNTY WATER UTILITIES SYSTEM STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION for the years ended September 30, 2018 and 2017

|  |  | $\underline{2018}$ |  | 2017 |
| :---: | :---: | :---: | :---: | :---: |
| Operating revenues: |  |  |  |  |
| Wastewater service | \$ | 129,805,731 | \$ | 122,480,230 |
| Water service |  | 52,640,677 |  | 52,326,367 |
| Reclaimed water service |  | 9,333,545 |  | 8,673,961 |
| Miscellaneous |  | 7,241,109 |  | 5,922,542 |
| Total operating revenues |  | 199,021,062 |  | 189,403,100 |
| Operating and maintenance expenses: |  |  |  |  |
| Personal services |  | 53,305,549 |  | 49,363,637 |
| Contractual services |  | 34,932,940 |  | 33,040,185 |
| Materials and supplies |  | 7,408,301 |  | 6,232,723 |
| Utilities |  | 14,819,903 |  | 14,350,795 |
| Repairs and maintenance |  | 20,221,890 |  | 16,089,820 |
| Other expenses |  | 7,603,916 |  | 6,737,152 |
| Pension and OPEB liability adjustment expense |  | 3,479,988 |  | 2,105,400 |
| Total operating and maintenance expenses |  | 141,772,487 |  | 127,919,712 |
| Operating income before depreciation and amortization |  | 57,248,575 |  | 61,483,388 |
| Depreciation and amortization |  | 70,153,964 |  | 85,089,702 |
| Operating loss |  | $(12,905,389)$ |  | $(23,606,314)$ |
| Nonoperating revenues (expenses): |  |  |  |  |
| Interest revenue |  | 1,910,087 |  | 1,184,175 |
| Interest expense and fiscal charges |  | $(4,345,230)$ |  | $(1,704,469)$ |
| Loss on disposal of assets |  | $(2,399,275)$ |  | $(29,567)$ |
| Total net nonoperating revenues (expenses) |  | $(4,834,418)$ |  | $(549,861)$ |
| Loss before contributions and transfers |  | $(17,739,807)$ |  | $(24,156,175)$ |
| Capital contributions Transfer out |  | $\begin{gathered} 79,686,161 \\ (9,100,000) \\ \hline \end{gathered}$ |  | $\begin{gathered} 80,023,832 \\ (8,200,000) \\ \hline \end{gathered}$ |
| Change in net position |  | 52,846,354 |  | 47,667,657 |
| Total net position, October 1 |  | 1,344,187,317 |  | 1,296,519,660 |
| Restatement |  | $(2,057,067)$ |  | - |
| Total net position, October 1, as restated |  | 1,342,130,250 |  | 1,296,519,660 |
| Total net position, September 30 | \$ | 1,394,976,604 | \$ | 1,344,187,317 |

See accompanying notes to financial statements.

## ORANGE COUNTY WATER UTILITIES SYSTEM STATEMENTS OF CASH FLOWS for the years ended September 30, 2018 and 2017

| Cash flows from operating activities: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Cash received from customers | \$ | 197,581,355 | \$ | 187,772,167 |
| Cash payments to suppliers for goods and services |  | $(85,975,626)$ |  | $(62,406,246)$ |
| Cash payments to employees for services |  | $(53,361,392)$ |  | $(49,020,076)$ |
| Net cash provided by operating activities |  | 58,244,337 |  | 76,345,845 |
| Cash flows from noncapital financing activities: |  |  |  |  |
| Transfer out |  | $(9,100,000)$ |  | $(8,200,000)$ |
| Net cash used by noncapital financing activities |  | $(9,100,000)$ |  | $(8,200,000)$ |
| Cash flows from capital and related financing activities: |  |  |  |  |
| Acquisition and construction of capital assets |  | $(95,669,345)$ |  | $(114,185,333)$ |
| Principal paid on long-term debt |  | $(2,077,159)$ |  | $(2,234,749)$ |
| Interest and fees paid on long-term debt |  | $(4,021,825)$ |  | $(3,478,213)$ |
| Capital contributions |  | 39,962,070 |  | 36,980,978 |
| Proceeds from state revolving fund loan |  | 19,083,942 |  | 20,662,721 |
| Proceeds from capital grant |  | 263,634 |  | 500,200 |
| Proceeds from disposition of assets |  | 859,318 |  | 341,229 |
| Net cash used by capital and related financing activities |  | $(41,599,365)$ |  | $(61,413,167)$ |
| Cash flows from investing activities: |  |  |  |  |
| Interest on investments |  | 1,837,413 |  | 975,376 |
| Net cash provided by investing activities |  | 1,837,413 |  | 975,376 |
| Net increase in cash and cash equivalents |  | 9,382,385 |  | 7,708,054 |
| Cash and cash equivalents, October 1 |  | 168,244,308 |  | 160,536,254 |
| Cash and cash equivalents, September 30 | \$ | 177,626,693 | \$ | 168,244,308 |
| Classified as: |  |  |  |  |
| Current assets | \$ | 119,573,333 | \$ | 116,470,409 |
| Current assets, restricted |  | 43,739,431 |  | 37,547,433 |
| Noncurrent assets, restricted |  | 14,313,929 |  | 14,226,466 |
| Total | \$ | 177,626,693 | \$ | 168,244,308 |

See accompanying notes to financial statements.
Continued

# ORANGE COUNTY WATER UTILITIES SYSTEM <br> STATEMENTS OF CASH FLOWS, Continued for the years ended September 30, 2018 and 2017 

$\underline{2018}$ ..... $\underline{2017}$
Reconciliation of operating loss to net cashprovided by operating activities:
Operating loss ..... \$ $(12,905,389) \quad \$ \quad(23,606,314)$
Adjustments to reconcile operating lossto net cash provided by operating activities:Depreciation and amortization
Pension and OPEB expense adjustment
Allowance for doubtful accounts
Decrease (increase) in assets:
Accounts receivableDue from other governmental agenciesInventories and prepaid costs
Increase (decrease) in liabilities:
Accounts payable and accrued liabilities
Customer deposits
Total adjustments
Net cash provided by operating activities
Noncash investing, capital and financing activities:
Capital assets donated by developers

Inventories and prepaid costs
Increase (decrease) in liabilities:Accounts payable and accrued liabilities

        Due to other governmental agenciesCustomer depositsTotal adjustments\((4,483,879) \quad 9,367,008\)
    $34,320 \quad(28,168)$423,4861,017,798
71,149,726 ..... 99,952,159
\$ ..... 58,244,337 \$ 76,345,845
$(1,773,855)$ ..... $(2,504,286)$362,171 215,187
2,925,097 ..... 4,608,978
\$ $39,724,091 ~ \$ ~ 43,042,854$

## A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## Organization and Purpose:

The Orange County Water Utilities System (the System) is owned and operated by the Orange County Board of County Commissioners, Orange County, Florida, an elected body (the Board). The System provides water and wastewater treatment service for areas within Orange County (County). The Orange County Comptroller, an elected official, provides the accounting and financial reporting functions for the System. The System is operated as a self-supporting governmental operation and is accounted for as an enterprise fund of the Board.

## Basis of Presentation:

The System uses the enterprise fund concept of accounting. Enterprise funds account for operations that are financed and operated in a manner similar to private business enterprises where the intent is that expenses of services provided to customers, as well as depreciation, amortization, and interest, be recovered primarily through user charges.

## Basis of Accounting:

The financial statements have been prepared on an accrual basis. Revenues are recognized when earned and expenses are recognized when incurred. In addition, the financial statements are prepared in conformity with accounting principles generally accepted in the United States of America.

## Use of Estimates:

The preparation of financial statements requires management to make use of estimates that affect reported amounts. Actual results could differ from estimates.

## Budgetary Data:

Florida Statutes require the Board to adopt an annual budget for the System on an accrual basis. Revenues and expenses are budgeted on a basis consistent with generally accepted accounting principles except that depreciation, amortization, noncash capital contributions, gains/losses on the disposal of assets, and pension and other postemployment benefits (OPEB) liability adjustments are not budgeted, capitalized net interest costs in Fiscal Year 2017 on funds borrowed to finance the construction of capital assets are budgeted as interest income and interest expense, capital outlays are budgeted as expense, and debt proceeds and principal payments are respectively budgeted as revenue and expense. Beginning net position and expense reserves are also included in the adopted budget. Encumbrance accounting, under which purchase orders are recorded as a reservation of available budget, is practiced during the year. At year end, outstanding encumbrances lapse and are not presented in the financial statements.

## A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

The annual budget is subject to amendment during the year. The County Administrator is authorized to approve transfers of appropriations between individual expense accounts. The Board, by motion, may approve transfers of appropriations between a reserve account and an expense account. The Board, by resolution recorded in the minutes, may add to the overall appropriations of the System due to a financing source unanticipated when the original budget was adopted or due to increased revenues above the level contemplated in the original budget.

Amendments to overall appropriations for any other reasons also require a public hearing prior to adoption. There were no amendments during the 2018 or the 2017 fiscal years which were extraordinary or unusual in cause or effect.

## Cash and Cash Equivalents and Investments:

The System's cash and cash equivalents consist of cash on hand, demand and time deposits, and highly liquid investments (including restricted assets) with a maturity of 90 days or less when purchased. With the exception of cash balances held for debt service requirements, the System's cash balances are pooled with other funds of the County for investment purposes. The County investment pool allows all participating funds the ability to deposit and withdraw cash daily as needed, and therefore all balances representing participants' equity in the investments pool are classified as cash equivalents for purposes of these statements. Earnings from the pooled investments are allocated to the System based on cash participation in the pool. All investments are stated at fair value. Investment fair values are based on quoted market prices, except for bankers' acceptances and commercial paper, which are based on amortized cost. Florida PRIME, a qualifying investment pool as provided by Governmental Accounting Standards Board (GASB) Statement No. 79, and money market mutual funds are stated at amortized cost, which is substantially the same as fair value.

## Accounts Receivable and Revenue Recognition:

Water and wastewater service fee revenues are recognized when earned, with an allowance for accounts considered uncollectible. The System records the amount of earned, but unbilled, service revenues. The amount of unbilled revenues included in accounts receivable was $\$ 8,956,887$ and $\$ 7,954,959$ as of September 30, 2018 and 2017 respectively. The System also records receivables for special assessments on certain construction projects. The amount of special assessments receivable included in accounts receivable was $\$ 436,650$ and $\$ 693,725$ as of September 30, 2018 and 2017, respectively. Of these amounts, $\$ 236,055$ and $\$ 291,865$, respectively, are expected to be collected within one year and thus is included in current accounts receivable; the remainder is reported as noncurrent.

Inventories and Prepaid Costs:
Inventories and prepaid costs consist of the following: inventory of parts and materials, valued at lower of cost (determined using the moving average method) or market; deposits paid for

## A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

future construction projects; and the portion of operating permit fees which is applicable to future periods. Prepaid permit fees are allocated to operating periods over the life of the permit, using the straight-line method.

## Restricted Assets:

The use of certain System assets is restricted by specific provisions of bond resolutions (see Note F) and agreements with various parties. Assets so designated are identified as restricted assets on the statements of net position. It is the System's policy to first apply restricted assets when an expense is incurred for purposes for which both restricted and unrestricted net position is available. Restricted assets classified as noncurrent are those which are for acquisition or construction of capital assets, for liquidation of long-term debts, or for other than current operations.

## Capital Assets:

Utility Plant is stated at cost when purchased or constructed, or at acquisition value at the time of acquisition when constructed by others and donated to the System. The System capitalizes payments for plant additions and improvements. The thresholds for capitalization of assets range from $\$ 500$ to $\$ 25,000$, depending on the asset class. Expenses for plant maintenance and repairs are charged as operating expense. Projects under construction are retained in Construction in Progress and are transferred into Utility Plant when placed in service.

Provisions for depreciation are made using the straight-line method, based upon the following estimated useful lives of the assets:

| Plant | 40 years |
| :--- | ---: |
| Pump stations | 30 years |
| Transmission and distribution lines | $10-20$ years |
| Machinery and equipment | $3-15$ years |

The System capitalizes costs associated with various intangible assets. These include initial payments under agreements with nearby utilities for the right to dispose of wastewater flows and payments to other utilities for the right to use certain water and wastewater lines. These capitalized costs are being amortized using the straight-line method over the expected lives of the assets, which is 3 to 40 years for the wastewater disposal agreements and 5 to 15 years for the rights to use lines. Additionally, the System capitalizes the value of purchased (at cost) and donated (at acquisition value) permanent land easements.

## A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

## Deferred Outflows and Inflows of Resources:

The System presents amounts related to pensions and OPEB as deferred outflows of resources and deferred inflows of resources.

## Accounts Payable and Accrued Liabilities:

Current liabilities reported as accounts payable and accrued liabilities were comprised of the following components at September 30:

| foll | 2018 | 2017 |
| :---: | :---: | :---: |
| Due to vendors | \$ 27,926,979 | \$31,388,728 |
| Salaries and benefits payable | 5,039,912 | 5,103,341 |
| Total | \$ 32,966,891 | \$36,492,069 |

## Compensated Absences:

The System accrues a liability, with a corresponding charge to current operations, for employees' rights to receive compensation for future absences to be subsequently taken or paid at point of employment termination in accordance with GASB Statement No. 16. The liability for compensated absences was $\$ 5,317,634$ and $\$ 5,230,820$ at September 30, 2018 and 2017, respectively. Of these amounts, $\$ 3,777,240$ and $\$ 3,695,790$, respectively, is expected to be paid out within one year and thus is included in current liabilities; the remainder is reported as noncurrent. The current portion is based on the average annual amount of leave paid over the preceding three years.

## Operating and Nonoperating Revenues:

The System reports as operating revenues all user fees generated through water and wastewater treatment services. Other revenues, such as non-capital grants and interest revenue, are classified as nonoperating.

## Capitalization of Interest:

With the implementation of GASB Statement No. 89 in Fiscal Year 2018, the System no longer capitalizes net interest costs on funds used to finance the construction of capital assets. The statement requires prospective application. As such, beginning with the fiscal year ended September 30, 2018, interest costs are reported as expense for the period. The amount of net interest cost capitalized was $\$ 1,887,749$ for the fiscal year ended September 30, 2017.

The total interest cost for the System was $\$ 4,345,230$ and $\$ 3,592,219$ for the fiscal years ended September 30, 2018 and 2017, respectively.

## A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

## Pension Expense:

The System expenses required pension contributions as a component of personal services expense. The remaining portion of pension expense, consisting of the proportionate share of the Florida Retirement System's actuarially determined pension expense in excess of amounts contributed by the System, is presented as pension liability adjustment.

## Other Postemployment Benefit Expense:

The System expenses other postemployment benefit (OPEB) contributions as a component of personal services expense. The remaining portion of OPEB expense, consisting of the actuarially determined portion of the County's OPEB expense in excess of amounts contributed by the System, is presented as OPEB liability adjustment.

## Bond Amortization Costs:

Bond premium is being amortized over the life of the debt using the interest method. Some of these costs were capitalized as noted above, for Fiscal Year 2017.

Amortization of the bond premium is recorded as a component of interest expense. Amortization of these bond costs for the fiscal years ended September 30, 2018 and 2017 was as follows:

|  | $\frac{2018}{}$ | $\frac{2017}{}$Amortization of bond premium <br> Portion capitalized | $\$ 1,018,145$ |
| :--- | :---: | :---: | :---: |

## Capital Contributions:

Capital contributions revenue represents amounts received for connection fees charged to customers for initial hook-up to the System's water and wastewater lines, or fixed assets donated by developers. Pursuant to County Ordinance No. 92-10, connection fees are discounted for eligible affordable housing projects. Total cumulative affordable housing discounts given on connection fees were $\$ 10,510,933$ as of September 30, 2018 and 2017. Additionally, pursuant to County Ordinance No. 94-21, water and wastewater connection fees are discounted for each residential lot that receives service from a Reclaimed Water Distribution System. Total cumulative discounts related to this ordinance were $\$ 12,838,657$ and $\$ 11,501,007$ as of September 30, 2018 and 2017, respectively.

## A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

## New Accounting Pronouncements:

Effective October 1, 2017, the System adopted the provisions of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions. Statement No. 75 represents a significant change to the reporting requirements for OPEB plans by establishing a net OPEB liability, an actuarially calculated amount representing the OPEB benefits accrued by current employees and retirees of the System. Certain estimates and assumptions are involved with the calculation of the net OPEB liability and actual results may differ. The impact of differences between estimated and actual results are presented as deferred inflows of resources or deferred outflows of resources. These deferred inflows and outflows will be applied in the calculation of the OPEB expense over time, reducing the volatility created by items such as investment performance.

Effective October 1, 2016, the System adopted the provisions of GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. Implementation of this statement resulted in distinction of the System's revenue bonds offered for public sale from other direct borrowing and additional disclosure of terms specified in debt agreements.

Effective October 1, 2017, the System adopted the provisions of GASB Statement No. 89, Accounting for Interest Cost Incurred before the End of a Construction Period. Prior to the implementation, applicable interest costs of the System were capitalized for assets under construction. The interest became part of the cost of the associated asset and would then be depreciated over the useful life of the asset. Beginning with Fiscal Year 2018, the interest costs are reported as an expense for the period in which the expense is incurred. To illustrate the impact of this change, the amount of interest that was capitalized during Fiscal Year 2017 was $\$ 1,887,749$, which would have been included in the interest expense amount if GASB 89 were in effect for that reporting period. This Statement requires prospective application. Therefore, no prior period adjustments have been applied and the interest capitalized prior to this statement continues to be included in the historical cost of the assets.
(Remainder of page intentionally left blank)

## B. DEPOSIT AND INVESTMENT RISK

As of September 30, 2018 and 2017, the carrying value of the System's deposits and investments, with their respective Standard \& Poor's and Moody's Investors Service credit ratings, was as follows:

| Investment Type | 2018 |  | 2017 |  | Credit Rating |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Demand and time deposits | \$ | 10,507,314 | \$ | 6,629,222 | NA |
| County investment pool: |  |  |  |  |  |
| Florida PRIME |  | 76,765,590 |  | 35,367,066 | AAAm |
| U.S. Treasury Bills |  | 6,059,731 |  | - | A-1+ |
| U.S. Treasury Notes |  | 82,125,690 |  | 117,162,964 | AA+/Aaa |
| Federal instrumentalities: |  |  |  |  |  |
| Notes and bonds |  | 2,167,146 |  | 9,083,823 | AA+/Aaa |
| Money market mutual funds |  | 1,222 |  | 1,233 | AAAm/Aaa-mf |
| Total | \$ | 177,626,693 | \$ | 168,244,308 |  |

The System's fair value measurement for U.S. Treasury Bills, U.S. Treasury Notes and Federal Instrumentalities uses observable inputs other than quoted prices in active markets (Level 2 inputs). Demand and time deposits, Florida PRIME and money market mutual funds are valued at amortized cost.

The System deposits all cash and investments, with the exception of cash balances for debt service, in the County's investment pool portfolio. Funds required to be provided for debt service are maintained by the System separately from the pooled investments. Investment balances by type, included in the County's investment pool, are presented above based on the System's proportionate share of the investment pool portfolio.

## Credit Risk:

The Board's Investment Policy (Policy) limits credit risk by restricting authorized investments to the following: obligations issued or explicitly guaranteed by the U.S. Government (Treasuries), obligations of certain U.S. Government-sponsored Federal instrumentalities (Instrumentalities), direct obligations of states and municipalities, repurchase agreements comprised of Treasuries or Instrumentalities, Florida PRIME administered by the Florida State Board of Administration, commercial paper, bankers' acceptances, bank certificates of deposit or savings accounts, and money market mutual funds (Money Markets). The Policy requires that investments in Instrumentality debt be guaranteed by the full faith and credit of the U. S. Government-sponsored agency, and that investments in Money Markets have a Standard \& Poor's rating of AAAm or AAAg. Eligible Money Markets are limited to those comprised of Treasuries.

## B. DEPOSIT AND INVESTMENT RISK, Continued

## Concentration of Credit Risk:

Except for Treasuries, the Policy establishes limitations on portfolio composition for all permitted investments, both by investment type and by issuer, in order to control concentration of credit risk. The Policy, which pertains to the overall investment pool portfolio of the Board and is not monitored at the individual fund level, provides that a maximum of $45 \%$ of the portfolio may be invested in any of four specified Instrumentalities, with a limit of $15 \%$ of the portfolio invested in any one issuer; and that a maximum of $25 \%$ of the portfolio may be invested in Money Markets, with a limit of $10 \%$ of the portfolio invested in any one issuer. At September 30, 2018, the System's portion of the Board investment pool portfolio was invested in two authorized Instrumentalities, each of which represented less than one percent of the total pool portfolio.

## Custodial Credit Risk:

The Policy requires that bank demand and time deposits be secured as provided by Chapter 280, Florida Statutes. This law requires local governments to deposit funds only in financial institutions designated as qualified public depositories by the Chief Financial Officer of the State of Florida. At September 30, 2018 and 2017, all of the System's bank deposits were in qualified public depositories.

The Policy requires execution of a third-party custodial safekeeping agreement for all purchased securities, and requires that securities be held in the Board's name. At September 30, 2018 and 2017, all of the System's investments are held in a bank's trust department in the Board's name.

## Interest Rate Risk:

For all investment types, the Policy limits the investment of current operating funds to 13 months. To increase returns and provide diversity, the Policy also provides for the investment of noncurrent (beyond 13 months) operating funds in investments with maturities no longer than 60 months. Noncurrent operating funds are invested in the intermediate term portfolio with a maximum maturity of 36 months, and the noncurrent operating portfolio with a maximum maturity of 60 months. Construction funds and debt service reserve funds may be invested for up to 10 years, subject to debt covenant restrictions and liquidity needs.

The System's investments had weighted average maturities of 9.7 months and 13.8 months at September 30, 2018 and 2017, respectively. The portfolio did not contain any callable securities at September 30, 2018 and 2017. The Money Markets have a weighted average maturity of not more than 60 days.

## C. RESTRICTED ASSETS

The bond resolutions authorizing the issuance of the System's bonds and provisions of the loan agreements with the State of Florida Department of Environmental Protection require segregation of certain assets into restricted accounts. In addition, the System restricts funds available for repayment of customer deposits.

Restricted assets were as follows at September 30, 2018 and 2017:
Cash and Cash
Equivalents
September 30, 2018:

| Operation and maintenance fund | $\$$ | $26,257,416$ |
| :--- | ---: | ---: |
| Revenue fund | 133,083 |  |
| Bond principal account | $3,274,101$ |  |
| Bond interest account | $1,456,875$ |  |
| Bond renewal and replacement fund | $8,000,000$ |  |
| Bond reserve account | $6,313,929$ |  |
| Loan debt service | $1,295,920$ |  |
| Loan repayment reserve | 760,140 |  |
| Customer deposits | $10,561,896$ |  |
| Total restricted assets | $58,053,360$ |  |
| Less: current portion | $\mathbf{4 3 , 7 3 9 , 4 3 1}$ |  |
| Noncurrent portion | $\underline{\$ 14,313,929}$ |  |

September 30, 2017:

| Operation and maintenance fund | $\$$ | $24,559,674$ |
| :--- | ---: | ---: |
| Revenue fund | 66,221 |  |
| Bond interest account | $1,455,517$ |  |
| Bond renewal and replacement fund | $8,000,000$ |  |
| Bond reserve account | $6,226,466$ |  |
| Loan debt service | 567,471 |  |
| Loan repayment reserve | 760,140 |  |
| Customer deposits | $10,138,410$ |  |
| Total restricted assets | $51,773,899$ |  |
| Less: current portion | $37,547,433$ |  |
| Noncurrent portion | $\$ 14,226,466$ |  |

## D. CAPITAL ASSETS

Capital asset activity for the years ended September 30, 2018 and 2017 was as follows:

|  | $\begin{gathered} \text { Balance } \\ \text { 10/1/2017 } \end{gathered}$ |  | Additions |  | Reductions |  | Balance 9/30/2018 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capital assets, not being depreciated: |  |  |  |  |  |  |  |  |
| Land | \$ | 102,425,884 | \$ | 209,911 | \$ | - | \$ | 102,635,795 |
| Construction in progress |  | 205,530,959 |  | 87,192,742 |  | $(36,823,031)$ |  | 255,900,670 |
| Total capital assets, not being depreciated |  | 307,956,843 |  | 87,402,653 |  | (36,823,031) |  | 358,536,465 |
| Capital assets, being depreciated/amortized: |  |  |  |  |  |  |  |  |
| Buildings |  | 30,025,584 |  | 115,912 |  | - |  | 30,141,496 |
| Improvements other than buildings |  | 2,073,884,471 |  | 55,922,144 |  | - |  | 2,129,806,615 |
| Machinery and equipment |  | 101,069,132 |  | 6,144,826 |  | $(6,523,771)$ |  | 100,690,187 |
| Intangible |  | 96,279,480 |  | 20,341,069 |  | $(49,601)$ |  | 116,570,948 |
| Total capital assets, being depreciated/amortized |  | 2,301,258,667 |  | 82,523,951 |  | $(6,573,372)$ |  | 2,377,209,246 |
| Less accumulated depreciation/amortization for: |  |  |  |  |  |  |  |  |
| Buildings |  | $(12,577,660)$ |  | $(1,220,886)$ |  | - |  | $(13,798,546)$ |
| Improvements other than buildings |  | $(1,118,509,212)$ |  | (63,031,791) |  |  |  | (1,181,541,003) |
| Machinery and equipment |  | $(77,381,928)$ |  | $(5,448,776)$ |  | 6,212,658 |  | $(76,618,046)$ |
| Intangible |  | $(12,465,945)$ |  | $(452,511)$ |  | 49,601 |  | $(12,868,855)$ |
| Total accumulated depreciation/amortization |  | (1,220,934,745) |  | $(70,153,964)$ |  | 6,262,259 |  | (1,284,826,450) |
| Total capital assets, being depreciated/amortized, net |  | 1,080,323,922 |  | 12,369,987 |  | (311,113) |  | 1,092,382,796 |
| Total System capital assets, net | \$ | 1,388,280,765 | \$ | 99,772,640 | \$ | (37,134,144) | \$ | 1,450,919,261 |
|  |  | $\begin{gathered} \text { Balance } \\ 10 / 1 / 2016 \\ \hline \end{gathered}$ |  | Additions |  | Reductions |  | $\begin{gathered} \text { Balance } \\ \text { 9/30/2017 } \end{gathered}$ |
| Capital assets, not being depreciated: |  |  |  |  |  |  |  |  |
| Land | \$ | 102,182,662 | \$ | 243,222 | \$ | - | \$ | 102,425,884 |
| Construction in progress |  | 139,637,369 |  | 105,242,367 |  | $(39,348,777)$ |  | 205,530,959 |
| Total capital assets, not being depreciated |  | 241,820,031 |  | 105,485,589 |  | $(39,348,777)$ |  | 307,956,843 |
| Capital assets, being depreciated/amortized: |  |  |  |  |  |  |  |  |
| Buildings |  | 30,025,584 |  | - |  | - |  | 30,025,584 |
| Improvements other than buildings |  | 2,009,079,567 |  | 64,804,904 |  | - |  | 2,073,884,471 |
| Machinery and equipment |  | 98,680,460 |  | 4,182,958 |  | $(1,794,286)$ |  | 101,069,132 |
| Intangible |  | 75,747,268 |  | 20,795,587 |  | $(263,375)$ |  | 96,279,480 |
| Total capital assets, being depreciated/amortized |  | 2,213,532,879 |  | 89,783,449 |  | (2,057,661) |  | 2,301,258,667 |
| Less accumulated depreciation/amortization for: |  |  |  |  |  |  |  |  |
| Buildings |  | $(11,367,663)$ |  | $(1,209,997)$ |  | - |  | $(12,577,660)$ |
| Improvements other than buildings |  | (1,040,965,956) |  | $(77,543,256)$ |  | - |  | $(1,118,509,212)$ |
| Machinery and equipment |  | $(73,179,227)$ |  | $(5,877,066)$ |  | 1,674,365 |  | $(77,381,928)$ |
| Intangible |  | $(12,269,937)$ |  | $(459,383)$ |  | 263,375 |  | $(12,465,945)$ |
| Total accumulated depreciation/amortization |  | (1,137,782,783) |  | (85,089,702) |  | 1,937,740 |  | (1,220,934,745) |
| Total capital assets, being depreciated/amortized, net |  | 1,075,750,096 |  | 4,693,747 |  | (119,921) |  | 1,080,323,922 |
| Total System capital assets, net |  | 1,317,570,127 | \$ | 110,179,336 | \$ | $(39,468,698)$ | \$ | 1,388,280,765 |

## E. CHANGES IN LONG-TERM LIABILITIES

A summary of the changes in long-term liabilities (current and noncurrent portions) of the System for the years ended September 30, 2018 and 2017 is as follows:

|  | Balance 10/1/17 <br> Restated |  | Additions |  | Reductions |  | Balance 9/30/18 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Compensated absences payable | \$ | 5,230,820 | \$ | 4,059,895 | \$ | $(3,973,081)$ | \$ | 5,317,634 |
| Revenue bonds payable |  | 89,035,000 |  | - |  | - |  | 89,035,000 |
| Less unamortized cost: Bond premium |  | 4,123,794 |  | - |  | $(1,018,145)$ |  | 3,105,649 |
| Total revenue bonds payable, net of unamortized costs |  | 93,158,794 |  | - |  | $(1,018,145)$ |  | 92,140,649 |
| Loans payable - direct borrowing |  | 76,391,573 |  | 19,986,005 |  | $(2,077,159)$ |  | 94,300,419 |
| Net pension liability |  | 38,845,855 |  | 2,438,820 |  | - |  | 41,284,675 |
| Net OPEB liability |  | 2,057,067 |  | 1,054,740 |  | $(929,243)$ |  | 2,182,564 |
| Total net pension and OPEB liability |  | 40,902,922 |  | 3,493,560 |  | $(929,243)$ |  | 43,467,239 |
| System long-term liabilities, including current portion | \$ | 215,684,109 | \$ | 27,539,460 | \$ | $(7,997,628)$ | \$ | 235,225,941 |
|  |  | $\begin{aligned} & \text { Balance } \\ & 10 / 1 / 16 \end{aligned}$ | Additions |  | Reductions |  |  | Balance <br> 9/30/17 |
| Compensated absences payable | \$ | 4,994,121 | \$ | 3,934,309 | \$ | $(3,697,610)$ | \$ | 5,230,820 |
| Revenue bonds payable |  | 89,035,000 |  | - |  | - |  | 89,035,000 |
| Less unamortized cost: |  |  |  |  |  |  |  |  |
| Bond premium |  | 5,141,939 |  | - |  | $(1,018,145)$ |  | 4,123,794 |
| Total revenue bonds payable, |  |  |  |  |  |  |  |  |
| Loans payable - direct borrowing |  | 57,107,143 |  | 21,332,297 |  | $(2,047,867)$ |  | 76,391,573 |
| Net pension liability |  | 35,774,094 |  | 3,071,761 |  | - |  | 38,845,855 |
| System long-term liabilities, including current portion | \$ | 192,052,297 | \$ | 28,338,367 | \$ | $(6,763,622)$ | \$ | 213,627,042 |

## F. REVENUE BONDS PAYABLE

On May 26, 2016, the Board issued Water and Wastewater Utility Revenue Bonds, Series 2016 in the amount of $\$ 89,035,000$ to finance certain costs relating to the acquisition, construction, and equipping of various capital improvements to the System, fund a deposit to the Reserve Account equal to the Reserve Account Requirement, and to pay expenses of issuance of the Series 2016 Bonds.

Series 2016 Bonds maturing on or after October 1, 2025, shall be subject to redemption at the option of the County prior to maturity in whole or in part on any date on or after October 1, 2024 at a redemption price equal to the principal amount thereof, without premium, plus interest accruing on the principal amount to be redeemed to the redemption date.

The total principal and interest remaining to be paid on this series was $\$ 115,801,228$ and $\$ 118,707,122$ as of September 30, 2018 and 2017, respectively. The first principal payment is due October 1, 2018. Interest paid was $\$ 2,905,894$ and $\$ 2,461,938$, and total pledged revenue was $\$ 56,925,321$ and $\$ 60,933,405$ respectively, for the years ended September 30, 2018 and 2017.

The following is a summary of revenue bonds payable as of September 30, 2018 and 2017:

|  | September 30 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\underline{2018}$ |  |  | $\underline{2017}$ |
| \$89,035,000 Water and Wastewater Utility |  |  |  |  |
| Revenue Bonds, Series 2016: |  |  |  |  |
| Serial bonds, due October 1, from 2018 to 2036 with interest due semi-annually on April 1 and October 1, at $2.00 \%$ to $5.00 \%$ | \$ | 89,035,000 | \$ | 89,035,000 |
| Unamortized bond premium |  | 3,105,649 |  | 4,123,794 |
| Series 2016 Bonds payable net of unamortized costs | \$ | 92,140,649 | \$ | 93,158,794 |

The Series 2016 Bonds are payable solely from, and secured by a lien on, a pledge of all the Net Revenues of the System, until applied to funds and accounts under the Resolution. The Board reserved the right to additionally pledge connection fees as security for the bonds. However, connection fees are not pledged to the Series 2016 Bonds. Neither the full faith and credit, the taxing power, nor any physical properties of the Board was pledged to the payment of the Series 2016 Bonds or the interest thereon.

## F. REVENUE BONDS PAYABLE, Continued

While the Series 2016 Bonds are outstanding, the Board covenanted to establish, fix, maintain and collect rates, fees and other charges for the product, services and facilities of the System to provide in each fiscal year:
(a) net revenues (excluding connection fees) which will equal at least $120 \%$ of the annual debt service on any outstanding bond, and
(b) net revenues which will equal at least 110\% of the annual debt service, and at the same time produce net revenues in each fiscal year which will equal at least $100 \%$ of any required deposits to certain accounts.

The bond resolution established certain funds and accounts and specifies the order in which revenues are to be deposited in these accounts, while the Series 2016 Bonds are outstanding. The purpose of various funds and accounts are as follows:

Revenue Fund - Deposit all gross revenues of the System, including special assessments, when and if pledged to the payment of the bonds.

Connection Fees Fund - Deposit all connection fees charged and collected by the System and interest earnings thereon, when and if pledged to the payment of the bonds. Connection fees are not currently pledged for the payment of the bonds.

Operation and Maintenance Fund - Deposit monthly from the Revenue Fund amounts sufficient to provide one month's expenses of operation and maintenance plus the maintenance of a reserve equal to 60 days' anticipated expenses of operation and maintenance. Moneys shall be used solely for the payment of the operating expenses.

Interest Account - Deposit monthly from the Revenue Fund an amount which, together with the balance in said Account, shall equal the interest on all bonds outstanding accrued and unpaid and to accrue to the end of the then current calendar month.

Principal Account - Deposit monthly from the Revenue Fund an amount which, commencing one year prior to the first principal payment date, together with the balance in said Account equals the principal amounts on all Bonds Outstanding due and unpaid and to accrue to the end of the then current calendar month.

Term Bonds Redemption Account - Deposit monthly from the Revenue Fund an amount which, commencing one year prior to the first principal payment date, together with the balance in said Account equals the principal amounts on all Term Bonds Outstanding due and unpaid and to accrue to the end of the then current calendar month.

## F. REVENUE BONDS PAYABLE, Continued

Reserve Account - Deposit monthly from the Revenue Fund an amount which would enable the County to restore the funds on deposit in the Reserve Account to an amount equal to the Reserve Account requirement. All deficiencies in the Reserve Account must be made up no later than 12 months from the date such deficiency first occurred. The Reserve Account will be used to prevent default in the payment of principal and interest payments that the System is unable to make for any reason.

Renewal and Replacement Fund - Deposit monthly from the Revenue Fund an amount which is at least equal to one-twelfth of the Renewal and Replacement Fund Requirement until the amount accumulated is equal to the Renewal and Replacement Fund Requirement.

Moneys shall be used to provide for the cost of major extensions, improvements or additions to, or the replacement or renewal of capital assets of, the System, or extraordinary repairs to the System provided that such moneys are not required to supplement any insufficiency in the Interest Account, the Term Bonds Redemption Account, or the Principal Account which still exists after the Reserve Account has been drawn down.

Utility Reserve Fund - Any moneys remaining in the Revenue Fund after all payments hereinabove required have been made are to be transferred to the Utility Reserve Revenue Fund. Moneys in this account are to be used for the following purposes and in the following order of priority:
(a) To restore the Interest Account, the Principal Account, the Term Bonds Redemption Account, the Reserve Account, and the Rebate Fund to the respective amounts required at that time to be therein;
(b) To any lawful purpose of the System;
(c) To the purchase of bonds or redemption of bonds;
(d) To the payment of debt service on subordinated debt;
(e) To the payment of other obligations incurred with respect to the System;
(f) To the Rate Stabilization Fund and improvements, renewals and replacements to the System.

In the event of default, all available pledged revenue shall be used to pay the interest and principal then due and unpaid upon the Bonds, with interest thereon.

## F. REVENUE BONDS PAYABLE, Continued

Future principal and interest payments (in thousands) required on the Series 2016 Bonds are as follows as of September 30, 2018:

| Fiscal Year <br> Ending September 30 | Principal |  | Interest |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2018 | \$ | 3,265 | \$ | 1,453 | \$ | 4,718 |
| 2019 |  | 3,430 |  | 2,743 |  | 6,173 |
| 2020 |  | 3,600 |  | 2,571 |  | 6,171 |
| 2021 |  | 3,780 |  | 2,391 |  | 6,171 |
| 2022 |  | 3,970 |  | 2,202 |  | 6,172 |
| 2023-2027 |  | 22,605 |  | 8,250 |  | 30,855 |
| 2028-2032 |  | 25,450 |  | 5,411 |  | 30,861 |
| 2033-2036 |  | 22,935 |  | 1,745 |  | 24,680 |
| Totals | \$ | 89,035 | \$ | 26,766 | \$ | 115,801 |

## G. LOANS PAYABLE - DIRECT BORROWING

In June 2002, the County began participating in the Clean Water State Revolving Fund Construction Loan Program with the State of Florida Department of Environmental Protection. Loan proceeds are being utilized by the System to finance various construction projects of the water and wastewater system. Pledged revenues are those pledged as security by the System in its bond resolution, after payment of operation and maintenance expenses and satisfaction of the yearly payment obligation for outstanding System revenue bonds. The Board has covenanted to maintain rates and charges for System services which will be sufficient in each fiscal year, after payment of senior and parity obligations, to provide pledged revenues of at least 1.15 times the sum of all Loan Program payments due in the fiscal year. Following is a description of each of the loans outstanding as of September 30, 2018.

Loan \#69214S was for construction of a central wastewater collection system in the Holden Heights area. The initial loan approved in June 2002 was for a total available amount of $\$ 8,457,900$. This was reduced in Fiscal Year 2008 to the actual amount drawn of $\$ 6,241,215$ to reflect the final cost of Phase 2 of the construction project. The principal balance outstanding was $\$ 2,576,739$ and $\$ 2,877,673$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 193,774$, including interest at $3.09 \%$, are due on March 15 and September 15 of each year, through March 15, 2026.

In August 2006, Ioan \#692150 was approved for a subsequent phase of the Holden Heights project, in the total available amount of $\$ 8,339,312$. This was reduced in Fiscal Year 2011 to the actual amount drawn of $\$ 6,540,920$ to reflect the final cost of Phase 3 of the construction project. The principal balance outstanding was $\$ 3,883,036$ and $\$ 4,183,790$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 204,412$, including interest at $2.63 \%$, are due on January 15 and July 15 of each year, through July 15, 2029.

## G. LOANS PAYABLE - DIRECT BORROWING, Continued

In March 2011, loan \#480360 was approved for the Lake Lawne Gravity Sewer Rehabilitation Project in the initial amount of $\$ 1,756,255$. This was reduced in Fiscal Year 2013 to the actual amount drawn of $\$ 1,734,755$ to reflect the final cost of the construction project. The principal balance outstanding was $\$ 1,245,981$ and $\$ 1,322,531$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 54,765$, including interest of $2.53 \%$, are due on February 15 and August 15 of each year through February 15, 2032.

In January 2012, Ioan \#480310 was approved for the South and Eastern Area Reclaimed Water Main Project in the initial amount of $\$ 5,064,998$. This was reduced in Fiscal Year 2017 to the actual amount drawn of $\$ 2,074,266$ to reflect the final cost of the construction project. The principal balance outstanding was $\$ 1,368,652$ and $\$ 1,443,769$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 54,517$, including interest of $2.38 \%$, are due on March 15 and September 15 of each year through September 2033.

In January 2012, Ioan \#480320 was approved for the East Southwood Gravity Sewer and Water System Project in the initial amount of \$4,360,690. This was reduced in Fiscal Year 2015 to the actual amount drawn of $\$ 2,946,957$ to reflect the final cost of the construction project. The principal balance outstanding was $\$ 2,215,585$ and $\$ 2,337,184$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 88,252$, including interest of $2.38 \%$, are due on March 15 and September 15 through September 15, 2033.

In January 2012, loan \#480330 was approved for the West Southwood Gravity Sewer and Water System Project in the initial amount of $\$ 2,655,957$. This was reduced in Fiscal Year 2013 to the actual amount drawn of $\$ 2,068,169$ to reflect the final cost of the construction contract. The principal balance outstanding was $\$ 1,511,003$ and $\$ 1,600,973$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 63,771$, including interest of 2.38\%, are due on March 15 and September 15 through September 15, 2032.

In January 2012, Ioan \#480380 was approved for the Huggins Street Pump Station Project in the initial amount of $\$ 3,981,328$. This was increased in Fiscal Year 2014 to $\$ 6,545,876$ for additional approved rehabilitation on Southwest Marriott Pumpstation and John Young Parkway Pumpstation. This was reduced in Fiscal Year 2017 to the actual amount drawn of \$6,297,137 to reflect the final cost of the construction project. The principal balance outstanding was $\$ 5,351,288$ and $\$ 5,613,657$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 196,801$, including interest of $2.38 \%$ on the original amount and $2.34 \%$ on the additional amount, are due on March 15 and September 15 of each year through March 2035.

## G. LOANS PAYABLE - DIRECT BORROWING, Continued

In December 2012, loan \#DW4803A0 was approved for South and Eastern Area Water Main Project in the initial amount of $\$ 10,807,569$. The first draw on this loan was received in March 2014. The principal balance outstanding was $\$ 7,837,632$ and $\$ 8,331,951$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 328,839$, including interest of $1.99 \%$, are due on March 15 and September 15 of each year, through September 15, 2032.

In December 2012, loan \#DW4803B0 was approved for Hidden Springs Water Facility Improvements Project in the initial amount of $\$ 4,196,246$. The first draw on this loan was received in May 2014. The principal balance outstanding was $\$ 3,298,886$ and $\$ 3,250,413$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 127,678$, including interest of $1.99 \%$, are due on January 15 and July 15 of each year, through July 15, 2032.

In September 2013, loan \#WW4803D0 was approved for I-Drive Forcemain and Reclaimed Water Main Improvements Project in the initial amount of $\$ 7,571,449$. This was reduced in Fiscal Year 2017 to the actual amount drawn of $\$ 7,122,045$ to reflect the final cost of the construction project. The principal balance outstanding was $\$ 6,310,449$ and $\$ 6,476,694$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 228,846$, including interest of 1.92\% were due on April 15 and October 15 of each year, from April 15, 2016 through April 15, 2017. Semiannual payments for the period October 15, 2017 through October 15,2035 , were reduced to $\$ 213,138$ to reflect the reduction in loan amount.

In May 2014, loan \#WW4803E0 was approved for Eastern Water Reclamation Facility Phase V Improvements Project in the initial amount of $\$ 30,139,180$. This was increased in Fiscal Year 2015 to $\$ 61,985,280$ and in Fiscal Year 2016 to $\$ 73,003,611$ to reflect additional approved construction costs of the project. The first draw on this loan was received in June 2015. The principal balance outstanding was $\$ 58,701,168$ and $\$ 38,952,938$ as of September 30, 2018 and 2017, respectively. For this loan, semiannual payments of $\$ 2,232,470$, including interest of $2.26 \%$, on the original amount, $1.91 \%$ on the first additional amount and $1.82 \%$ on the second additional amount, are due on February 15 and August 15 of each year for a 15-year period beginning February 2019.

The total principal and interest remaining to be paid on these loans was $\$ 109,124,611$ and $\$ 92,393,061$ as of September 30, 2018 and 2017, respectively. Principal and interest paid was $\$ 3,051,891$ and $\$ 3,083,307$ and total pledged revenue was $\$ 50,754,427$ and $\$ 58,027,511$ respectively, for the fiscal years ended September 30, 2018 and 2017.

In the event of default on these loans, the System may be caused to establish rates and collect fees and charges for use of the System in order to fulfill the agreements. The State of Florida Department of Environmental Protection may accelerate the repayment schedule or increase the interest rate on the unpaid principal up to 1.667 times the original interest rate with the exception of loan \#69214S, which may increase up to 3.333 times the original interest rate.

## G. LOANS PAYABLE - DIRECT BORROWING, Continued

Future principal and interest payments (in thousands) required on the State Revolving Loans are as follows as of September 30, 2018:

| Fiscal Year Ending September 30 | Principal |  | Interest |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2019 | \$ | 5,673 | \$ | 1,844 | \$ | 7,517 |
| 2020 |  | 5,789 |  | 1,728 |  | 7,517 |
| 2021 |  | 5,907 |  | 1,610 |  | 7,517 |
| 2022 |  | 6,027 |  | 1,490 |  | 7,517 |
| 2023 |  | 6,150 |  | 1,367 |  | 7,517 |
| 2024-2028 |  | 31,684 |  | 4,931 |  | 36,615 |
| 2029-2033 |  | 31,037 |  | 1,806 |  | 32,843 |
| 2034-2036 |  | 2,034 |  | 48 |  | 2,082 |
| Totals | \$ | 94,301 | \$ | 14,824 |  | 09,125 |

## H. RETIREMENT SYSTEMS

## Florida Retirement System:

General Information - All of the System's employees participate in the Florida Retirement System (FRS). As provided by Chapters 121 and 112, Florida Statutes, the FRS provides two cost sharing, multiple employer defined benefit plans administered by the Florida Department of Management Services, Division of Retirement, including the FRS Pension Plan ("Pension Plan") and the Retiree Health Insurance Subsidy ("HIS Plan"). Under Section 121.4501, Florida Statutes, the FRS also provides a defined contribution plan ("Investment Plan") alternative to the FRS Pension Plan, which is administered by the State Board of Administration ("SBA"). As a general rule, membership in the FRS is compulsory for all employees working in a regularly established position for a state agency, county government, district school board, state university, community college, or a participating city or special district within the State of Florida. The FRS provides retirement and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. Benefits are established by Chapter 121, Florida Statutes, and Chapter 60S, Florida Administrative Code. Amendments to the law can be made only by an act of the Florida State Legislature.

The State of Florida annually issues a publicly available financial report that includes financial statements and required supplementary information for the FRS. The latest available report may be obtained by writing to the State of Florida Division of Retirement, Department of Management Services, P.O. Box 9000, Tallahassee, Florida 32315-9000, or from the Web site:www.dms.myflorida.com/workforce operations/retirement/publications.

## H. RETIREMENT SYSTEMS, Continued

## Pension Plan

Plan Description - The Pension Plan is a cost-sharing multiple-employer defined benefit pension plan, with a Deferred Retirement Option Program ("DROP") for eligible employees.

Benefits Provided - Benefits under the Pension Plan are computed on the basis of age, average final compensation, and service credit. For Pension Plan members enrolled before July 1, 2011, Regular class members who retire at or after age 62 with at least six years of credited service or 30 years of service regardless of age are entitled to a retirement benefit payable monthly for life, equal to $1.6 \%$ of their final average compensation based on the five highest years of salary, for each year of credited service. Vested members with less than 30 years of service may retire before age 62 and receive reduced retirement benefits. Special Risk Administrative Support class members who retire at or after age 55 with at least six years of credited service or 25 years of service regardless of age are entitled to a retirement benefit payable monthly for life, equal to $1.6 \%$ of their final average compensation based on the five highest years of salary, for each year of credited service. Special Risk class members (sworn law enforcement officers, firefighters, and correctional officers) who retire at or after age 55 with at least six years of credited service, or with 25 years of service regardless of age, are entitled to a retirement benefit payable monthly for life, equal to $3.0 \%$ of their final average compensation based on the five highest years of salary for each year of credited service. Senior Management Service class members who retire at or after age 62 with at least six years of credited service or 30 years of service regardless of age are entitled to a retirement benefit payable monthly for life, equal to $2.0 \%$ of their final average compensation based on the five highest years of salary for each year of credited service. Elected Officers' class members who retire at or after age 62 with at least six years of credited service or 30 years of service regardless of age are entitled to a retirement benefit payable monthly for life, equal to $3.0 \%$ ( $3.33 \%$ for judges and justices) of their final average compensation based on the five highest years of salary for each year of credited service.

For Plan members enrolled on or after July 1, 2011, the vesting requirement is extended to eight years of credited service for all these members and increasing normal retirement to age 65 or 33 years of service regardless of age for Regular, Senior Management Service, and Elected Officers' class members, and to age 60 or 30 years of service regardless of age for Special Risk and Special Risk Administrative Support class members. Also, the final average compensation for all these members will be based on the eight highest years of salary.

## H. RETIREMENT SYSTEMS, Continued

As provided in Section 121.101, Florida Statutes, if the member is initially enrolled in the Pension Plan before July 1, 2011, and all service credit was accrued before July 1, 2011, the annual cost-of- living adjustment is three percent per year. If the member is initially enrolled before July 1, 2011, and has service credit on or after July 1, 2011, there is an individually calculated cost-of-living adjustment. The annual cost-of-living adjustment is a proportion of three percent determined by dividing the sum of the pre-July 2011 service credit by the total service credit at retirement multiplied by three percent. Plan members initially enrolled on or after July 1, 2011, will not have a cost-of-living adjustment after retirement.

In addition to the above benefits, the DROP program allows eligible members to defer receipt of monthly retirement benefit payments while continuing employment with a FRS employer for a period not to exceed 60 months after electing to participate. Deferred monthly benefits are held in the FRS Trust Fund and accrue interest. There are no required contributions by DROP participants.

Contributions - Effective July 1, 2011, all enrolled members of the FRS, other than DROP participants, are required to contribute three percent of their salary to the FRS. In addition to member contributions, governmental employers are required to make contributions to the FRS based on state-wide contribution rates established by the Florida Legislature. These rates are updated as of July 1 of each year. The employer contribution rates by job class for the periods from October 1, 2017 through June 30, 2018 and from July 1, 2018 through September 30, 2018, respectively, were as follows: Regular--7.92\% and 8.26\%; Special Risk Administrative Support--34.63\% and 34.98\%; Special Risk--23.27\% and 24.50\%; Senior Management Service--22.71\% and 24.06\%; Elected Officers'--45.50\% and 48.70\%; and DROP participants--13.26\% and 14.03\%. These employer contribution rates include 1.66\% HIS Plan subsidy for the period October 1, 2017 through September 30, 2018.

The System's contributions to the Pension Plan totaled \$2,726,335 and \$2,321,868 for the fiscal years ended September 30, 2018 and 2017, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - The System reported a liability of \$28,102,709 and $\$ 26,070,701$ for its proportionate share of the Board's Pension Plan's net pension liability as of September 30, 2018 and 2017, respectively. The net pension liability for each fiscal year was measured as of June 30, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation in each year as of July 1. The

## H. RETIREMENT SYSTEMS, Continued

System's proportionate share of the net pension liability was based on the System's fiscal year contributions relative to the same fiscal year contributions of all participating members of the Board. At September 30, 2018, the System's proportionate share was $6.32 \%$, which was an increase of $0.34 \%$ from its proportionate share of $5.98 \%$ measured as of September 30, 2017.

For the fiscal years ended September 30, 2018 and 2017, the System recognized pension expense of $\$ 4,813,084$ and $\$ 4,368,362$. In addition, the System reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

| Description | Deferred Outflows of Resources |  |  |  | Deferred Inflows of Resources |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 9/30/18 |  | 9/30/17 |  | 9/30/18 |  | 9/30/17 |  |
| Differences between expected and actual experience | \$ | 2,380,722 | \$ | 2,392,663 | \$ | 86,409 | \$ | 144,418 |
| Change of assumptions |  | 9,182,599 |  | 8,761,596 |  | - |  | - |
| Net difference between projected and actual earnings on Pension Plan investments |  | - |  | - |  | 2,171,277 |  | 646,097 |
| Changes in proportion and differences between System Pension Plan contributions and proportionate share of contributions |  | 703,045 |  | 811,168 |  | 161,699 |  | 266,968 |
| System Pension Plan contributions subsequent to the measurement date |  | 764,660 |  | 655,114 |  | - |  | - |
| Total | \$ | 13,031,026 | \$ | 12,620,541 | \$ | 2,419,385 | \$ | 1,057,483 |

## H. RETIREMENT SYSTEMS, Continued

The deferred outflows of resources related to the Pension Plan resulting from System contributions to the Plan subsequent to the measurement date, totaling $\$ 764,660$, will be recognized as a reduction of the net pension liability in the fiscal year ended September 30, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the Pension Plan will be recognized in pension expense as follows:

| September 30: | Amount |  |
| :---: | ---: | ---: |
|  |  |  |
| 2019 | $\$$ | $3,666,193$ |
| 2020 |  | $2,602,060$ |
| 2021 |  | 522,780 |
| 2022 |  | $1,760,445$ |
| 2023 |  | $1,131,094$ |
| Thereafter |  | 164,409 |

Actuarial Assumptions - The total pension liability in the July 1, 2018 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

| Inflation | $2.60 \%$ |
| :--- | :--- |
| Salary increases | $3.25 \%$, average, including inflation |
| Investment rate of return | $7.00 \%$, net of pension plan investment <br>  <br>  <br>  expense, including inflation |

Mortality rates were based on the Generational RP-2000 with Projection Scale BB tables.
The actuarial assumptions used in the July 1, 2018 valuation were based on the results of an actuarial experience study for the period July 1, 2008 through June 30, 2013.

The long-term expected rate of return on Pension Plan investments was not based on historical returns, but instead is based on a forward-looking capital market economic model. The allocation policy's description of each asset class was used to map the target allocation to the asset classes shown below. Each asset class assumption is based on a consistent set of underlying assumptions and includes an adjustment for the inflation assumption. The target allocation and best estimates of arithmetic and geometric real rates of return for each major asset class are summarized in the following table:

## H. RETIREMENT SYSTEMS, Continued

| Asset Class | Target Allocation (1) | Annual <br> Arithmetic Return | Compound Annual (Geometric) Return | Standard Deviation |
| :---: | :---: | :---: | :---: | :---: |
| Cash | 1.0\% | 2.9\% | 2.9\% | 1.8\% |
| Fixed income | 18.0\% | 4.4\% | 4.3\% | 4.0\% |
| Global equity | 54.0\% | 7.6\% | 6.3\% | 17.0\% |
| Real estate (property) | 11.0\% | 6.6\% | 6.0\% | 11.3\% |
| Private equity | 10.0\% | 10.7\% | 7.8\% | 26.5\% |
| Strategic investments | 6.0\% | 6.0\% | 5.7\% | 8.6\% |
| Total | 100.0\% |  |  |  |
| Assumed Inflation - Mean |  | 2.6\% |  | 1.9\% |

## (1) As outlined in the Pension Plan's investment policy

Discount Rate - The discount rate used to measure the total pension liability was $7.00 \%$ and $7.10 \%$ for the July 1, 2018 and 2017 actuarial valuation, respectively. The 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 discount rate for calculation of the total pension liability is equal to the long-term expected rate of return.

Sensitivity of the System's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate - The following represents the System's proportionate share of the net pension liability calculated using the discount rate of $7.00 \%$ and $7.10 \%$, for the Fiscal Year 2018 and 2017, respectively, as well as what the System's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

## H. RETIREMENT SYSTEMS, Continued

|  |  | $\begin{gathered} \text { 1\% Decrease } \\ (6.00 \%) \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Current } \\ \text { Discount Rate } \\ (7.00 \%) \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { 1\% Increase } \\ (8.00 \%) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| System's proportionate share of the net pension liability at September 30, 2018 | \$ | 51,288,623 | \$ | 28,102,709 | \$ | 8,845,437 |
|  |  | $\begin{gathered} 1 \% \text { Decrease } \\ (6.10 \%) \\ \hline \end{gathered}$ |  | Discount Rate (7.10\%) |  | $\begin{gathered} \text { 1\% Increase } \\ (8.10 \%) \\ \hline \end{gathered}$ |
| System's proportionate share of the net pension liability at September 30, 2017 | \$ | 47,186,394 | \$ | 26,070,701 | \$ | 8,539,838 |

Pension Plan Fiduciary Net Position - Detailed information regarding the Pension Plan's fiduciary net position is available in the separately issued FRS Pension Plan and Other StateAdministered Systems Comprehensive Annual Financial Report.

Payables to the Pension Plan - At September 30, 2018 and 2017, the System reported de minimis amounts payable for outstanding contributions to the Pension Plan.

## HIS Plan

Plan Description - The HIS Plan is a cost-sharing multiple-employer defined benefit pension plan established under Section 112.363, Florida Statutes, and may be amended by the Florida legislature at any time. The benefit is a monthly payment to assist retirees of State-administered retirement systems in paying their health insurance costs and is administered by the Florida Department of Management Services, Division of Retirement.

Benefits Provided - For the fiscal year ended September 30, 2018, eligible retirees and beneficiaries received a monthly HIS payment of $\$ 5$ for each year of creditable service completed at the time of retirement, with a minimum HIS payment of $\$ 30$ and a maximum HIS payment of $\$ 150$ per month. To be eligible to receive these benefits, a retiree under a Stateadministered retirement system must provide proof of health insurance coverage, which may include Medicare.

## H. RETIREMENT SYSTEMS, Continued

Contributions - The HIS Plan is funded by required contributions from FRS participating employers as set by the Florida Legislature. Employer contributions are a percentage of gross compensation for all active FRS members. For the fiscal years ended September 30, 2018 and 2017, the HIS contribution rate was $1.66 \%$. The System contributed $100 \%$ of its statutorily required contributions for the current and preceding three years. HIS Plan contributions are deposited in a separate trust fund from which payments are authorized. HIS Plan benefits are not guaranteed and are subject to annual legislative appropriation. In the event legislative appropriation or available funds fail to provide full subsidy benefits to all participants, benefits may be reduced or cancelled.

The System's contributions to the HIS Plan totaled \$679,499 and \$645,964 for the fiscal years ended September 30, 2018 and 2017, respectively.

Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions - The System reported a liability of \$13,181,966 and $\$ 12,775,154$ for its proportionate share of the Board's HIS Plan's net pension liability as of September 30, 2018 and 2017, respectively. The net pension liability for each fiscal year was measured as of June 30, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation prepared as of July 1, 2018. The System's proportionate share of the net pension liability was based on the System's fiscal year contributions relative to the same fiscal year contributions of all participating members of the Board. At September 30, 2018, the System's proportionate share was $10.64 \%$, which was an increase of $0.19 \%$ from its proportionate share of $10.45 \%$ measured as of September 30, 2017.

## H. RETIREMENT SYSTEMS, Continued

For the fiscal years ended September 30, 2018 and 2017, the System recognized pension expense of $\$ 1,097,375$ and $\$ 1,036,523$, respectively. In addition, the System reported deferred outflows of resources related to pensions from the following sources:

| Description | Deferred Outflows of Resources |  |  |  | Deferred Inflows of Resources |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 9/30/18 |  | 9/30/17 |  | 9/30/18 |  | 9/30/17 |
| Differences between expected and actual experience | \$ | 201,810 | \$ | - | \$ | 22,396 | \$ | 26,600 |
| Change of assumptions |  | 1,465,998 |  | 1,795,747 |  | 1,393,708 |  | 1,104,681 |
| Net difference between projected and actual earnings on HIS Plan investments |  | 7,957 |  | 7,085 |  | - |  | - |
| Changes in proportion and differences between System HIS Plan contributions and proportionate share of contributions |  | 571,751 |  | 392,041 |  | - |  | - |
| System HIS Plan contributions subsequent to the measurement date |  | 181,546 |  | 174,288 |  | - |  | - |
| Total | \$ | 2,429,062 | \$ | 2,369,161 | \$ | 1,416,104 | \$ | 1,131,281 |

The deferred outflows of resources related to the HIS Plan resulting from System contributions to the HIS Plan subsequent to the measurement date, totaling $\$ 181,546$, will be recognized as a reduction of the net pension liability in the fiscal year ended September 30, 2019. Other amounts reported as deferred outflows of resources related to the HIS Plan will be recognized in pension expense as follows:

Fiscal Year Ending

September 30:

2019
2020
2021
2022
2023
Thereafter

Amount
\$ 301,982
301,311
230,491
119,041
$(96,746)$
$(24,667)$

## H. RETIREMENT SYSTEMS, Continued

Actuarial Assumptions - The total pension liability in the July 1, 2018 valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

| Inflation | $2.60 \%$ |
| :--- | :--- |
| Salary increases | $3.25 \%$, average, including inflation |
| Municipal bond rate | $3.87 \%$ |

Mortality rates were based on the Generational RP-2000 with Projection Scale BB tables.
The actuarial assumptions used to determine the July 1 valuations, were based on the results of an actuarial experience study for the period July 1, 2008 through June 30, 2013.

Discount Rate - The discount rate used to measure the total pension liability was $3.87 \%$ and $3.58 \%$ for the July 1, 2018 and 2017 actuarial valuation, respectively. In general, the discount rate for calculating the total pension liability is equal to the single rate equivalent to discounting at the long-term expected rate of return for benefit payments prior to the projected depletion date. Because the HIS benefit is essentially funded on a pay-as-you-go basis, the depletion date is considered to be immediate, and the single equivalent discount rate is equal to the municipal bond rate selected by the HIS Plan sponsor. The Bond Buyer General Obligation 20-Bond Municipal Bond Index was adopted as the applicable municipal bond index.

Sensitivity of the System's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate - The following represents the System's proportionate share of the net pension liability calculated using the discount rate of $3.87 \%$ and $3.58 \%$, for the Fiscal Year 2018 and 2017, respectively, as well as what the System's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

## H. RETIREMENT SYSTEMS, Continued

|  |  | $\begin{gathered} \text { 1\% Decrease } \\ (2.87 \%) \\ \hline \end{gathered}$ |  | Current <br> Discount Rate <br> $(3.87 \%)$ |  | $\begin{gathered} \text { 1\% Increase } \\ (4.87 \%) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| System's proportionate share of the net pension liability at September 30, 2018 | \$ | 15,013,487 | \$ | 13,181,966 | \$ | 11,655,287 |
|  |  | $\begin{gathered} 1 \% \text { Decrease } \\ (2.58 \%) \\ \hline \end{gathered}$ |  | Discount Rate (3.58\%) |  | 1\% Increase (4.58\%) |
| System's proportionate share of the net pension liability at September 30, 2017 | \$ | 14,578,142 | \$ | 12,775,154 | \$ | 11,273,364 |

HIS Plan Fiduciary Net Position - Detailed information regarding the HIS Plan's fiduciary net position is available in the separately issued FRS Pension Plan and Other StateAdministered Systems Comprehensive Annual Financial Report.

Payables to the HIS Plan - At September 30, 2018 and 2017, the System reported de minimus amounts payable for outstanding contributions to the HIS Plan.

## Investment Plan

The SBA administers the defined contribution plan officially titled the FRS Investment Plan. The Investment Plan is reported in the SBA's annual financial statements and in the State of Florida Comprehensive Annual Financial Report.

As provided in Section 121.4501, Florida Statutes, eligible FRS members may elect to participate in the Investment Plan in lieu of the FRS defined benefit plan. System employees participating in DROP are not eligible to participate in the Investment Plan. Employer and employee contributions, including amounts contributed to individual member's accounts, are defined by law, but the ultimate benefit depends in part on the performance of investment funds. Benefit terms, including contribution requirements, for the Investment Plan are established and may be amended by the Florida Legislature. The Investment Plan is funded with the same employer and employee contribution rates that are based on salary and membership class (Regular Class, Elected County Officers, etc.), as the Pension Plan. Contributions are directed to individual member accounts, individual members allocate contributions and account balances among various approved investment choices. Costs of administering the Investment Plan, including the FRS Financial Guidance

## H. RETIREMENT SYSTEMS, Continued

Program, are funded through an employer contribution and by forfeited benefits of plan members. The employer contribution for the periods from October 1, 2017 through September 30, 2018 was $0.06 \%$ of payroll. Allocations to the investment member's accounts during the 2017-18 fiscal year, as established by Section 121.72, Florida Statutes, are based on a percentage of gross compensation, by class, as follows: Regular class--6.30\%, Special Risk Administrative Support class--7.95\%, Special Risk class-14.00\%, Senior Management Service class--7.67\% and County Elected Officers class-11.34\%.

For all membership classes, employees are immediately vested in their own contributions and are vested after one year of service for employer contributions and investment earnings. If an accumulated benefit obligation for service credit originally earned under the Pension Plan is transferred to the Investment Plan, the member must have the years of service required for Pension Plan vesting (including the service credit represented by the transferred funds) to be vested for these funds and the earnings on the funds. Nonvested employer contributions are placed in a suspense account for up to five years. If the employee returns to FRS-covered employment within the five-year period, the employee will regain control over their account. If the employee does not return within the five-year period, the employee will forfeit the accumulated account balance. For the fiscal year ended September 30, 2018, the information for the amount of forfeitures was unavailable from the SBA; however, management believes that these amounts, if any, would be immaterial to the System.

After termination and applying to receive benefits, the member may rollover vested funds to another qualified plan, structure a periodic payment under the Investment Plan, receive a lump-sum distribution, leave the funds invested for future distribution, or any combination of these options. Disability coverage is provided; the member may either transfer the account balance to the Pension Plan when approved for disability retirement to receive guaranteed lifetime monthly benefits under the Pension Plan, or remain in the Investment Plan and rely upon that account balance for retirement income.

The System's Investment Plan pension expense totaled \$394,138 and \$453,509 for the fiscal years ended September 30, 2018 and 2017, respectively.

## I. POSTEMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS

Plan Description - In addition to the pension benefits described in Note H, the System offers a postemployment benefit plan (OPEB Plan) that subsidizes the cost of health care for its retirees and eligible dependents. Employees of the System with at least 10 years of combined service under the System and/or any other Board department or any of the five county officers (County Comptroller, Property Appraiser, Sheriff, Supervisor of Elections, or Tax Collector) who retire and immediately begin receiving benefits from the Florida

## I. POSTEMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS, Continued

Retirement System (FRS) are eligible to receive a monthly benefit of three dollars per year of service up to a maximum of $\$ 90$ per month. If combined service is at least 20 years and receipt of FRS benefits is deferred to a later date, the monthly benefit may be vested for commencement at such deferral date. Additionally, in accordance with State statute, Board employees who retire and immediately begin receiving benefits from the FRS have the option of continuing in the Board's health insurance plan at the same group rate as for active employees.

The Board has established the Orange County Health Care Benefit Trust (Trust), a singleemployer defined benefit OPEB plan for, and administered by, the Board and County officers noted above. The Board has the authority to establish and amend the Plan and engages an actuarial firm to determine each participant's estimated obligation and actuarially determined contribution (ADC). For Fiscal Year 2018, the System's ADC payment was $\$ 389,972$ representing $0.94 \%$ of the System's covered payroll amount of $\$ 41,453,539$. For Fiscal Year 2017, the System's actuarially determined annual OPEB cost (AOC) payment to the trust was $\$ 465,144$, representing $1.19 \%$ of the System's covered payroll amount of $\$ 39,051,967$. A full presentation of the Trust and OPEB Plan assets, liabilities, and actuarial methods and assumptions is included in the Orange County, Florida Comprehensive Annual Financial Report. Separate stand-alone financial statements for the Trust are not prepared.

At September 30, 2018, the date of the latest actuarial valuation, System employee plan participation consisted of:
Active members 727
Inactive employees currently receiving benefits 185
Inactive employees with deferred benefits 6

Net OPEB Liability - The System's net OPEB liability was measured as of September 30, 2018, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date.

## I. POSTEMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS, Continued

Actuarial Assumptions - The total OPEB liability in the September 30, 2018 actuarial valuation was determined based on a five-year actuarial experience study for the period ended September 30, 2018, and using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

The actuarial assumptions are:

Investment rate of return
Blended discount rate used to measure total OPEB liability
Projected annual salaries increase Inflation rate
Healthcare cost trend rate

Mortality
7.0\%
6.91\%
4.5\%
2.5\%

Pre-65 increase of 7.3\%; post 65 increase of 8.6\% for Fiscal Year 2018, grading to an ultimate rate of 5.0\% for Fiscal Year 2027

Pub-2010 Headcount Weighted General and Public Safety tables, projected with Scale MP2018

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rate of return (expected returns, net of OPEB 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 rate of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the OPEB plan's target asset allocation as of September 30, 2018 are summarized in the following table:

| Asset Class | Expected Nominal Rate of Return | Expected Real Rate of Return | Allocation |
| :---: | :---: | :---: | :---: |
| Large Cap U.S. Equity | 6.30\% | 3.71\% | 46.70\% |
| Small Cap U.S. Equity | 6.80\% | 4.20\% | 3.30\% |
| International Equity | 7.30\% | 4.68\% | 26.30\% |
| Emerging Markets Equity | 8.00\% | 5.37\% | 6.70\% |
| Non-US Developed Bond | 3.00\% | 0.49\% | 5.00\% |
| Intermediate Duration Bonds-Gov't | 2.80\% | 0.29\% | 7.80\% |
| Intermediate Duration Bonds-Credit | 3.70\% | 1.17\% | 4.20\% |
| Total Portfolio | 6.74\% | 4.14\% | 100.00\% |

## I. POSTEMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS, Continued

Changes in the Net OPEB Liability - for the System for the fiscal year ended September 30, 2018, is displayed in the following table:

|  | Increase (Decrease) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Total OPEB Liability <br> (a) |  | Plan Fiduciary Net Position (b) |  | Net OPEB Liability <br> (a) - (b) |
| Balances at 9-30-17 |  | 5,761,153 |  | 3,704,086 |  | 2,057,067 |
| Changes for the year: |  |  |  |  |  |  |
| Service cost |  | 252,811 |  | - |  | 252,811 |
| Interest |  | 326,079 |  | - |  | 326,079 |
| Differences between expected and actual experience |  | $(71,839)$ |  | - |  | $(71,839)$ |
| Changes of assumptions |  | 475,850 |  | - |  | 475,850 |
| Contribution - employer |  | - |  | 472,979 |  | $(472,979)$ |
| Net investment income |  | - |  | 384,425 |  | $(384,425)$ |
| Benefit payments |  | $(515,699)$ |  | $(515,699)$ |  | - |
| Net changes |  | 467,202 |  | 341,705 |  | 125,497 |
| Balances at 9-30-18 | \$ | 6,228,355 | \$ | 4,045,791 | \$ | 2,182,564 |

Plan fiduciary net position as a percentage of the total OPEB liability:
64.96\%

The discount rate used to measure the total OPEB liability is $6.91 \%$. The projection of cash flows used to determine the discount rate assumed the System would continue to fund the actuarially determined contribution. Only employer contributions that are intended to fund benefits of current plan members and their beneficiaries are included. Projected employer contributions that are intended to fund the service costs of future plan members and their beneficiaries, as well as projected contributions from future plan members, are not included.

Based on these assumptions, the OPEB fund's fiduciary net position was projected to be available to make all projected future benefit payments for current plan members through 2071.

## I. POSTEMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS, Continued

Sensitivity of the System's Net OPEB Liability to Changes in the Discount Rate - The following represents the System's net OPEB liability calculated using the discount rate of 6.91\%, as well as what the System's net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

|  | $\begin{gathered} \text { 1\% Decrease } \\ (5.91 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Current } \\ \text { Discount Rate } \\ (6.91 \%) \\ \hline \end{gathered}$ | $\begin{gathered} \text { 1\% Increase } \\ (7.91 \%) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| System's net OPEB liability at September 30, 2018 | \$ 2,742,093 | 2,182,564 | \$ 1,688,923 |

Sensitivity of the System's Net OPEB Liability to Changes in the healthcare cost trend rates The following represents the System's OPEB liability calculated using a health care cost trend rate of $8.6 \%$, as well as what the System's net OPEB liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate:

Current

| $1 \%$ Decrease <br> $(7.6 \%)$ | Discount Rate <br> $(8.6 \%)$ | $1 \%$ Increase <br> $(9.6 \%)$ |
| :---: | :---: | :---: |

System's net OPEB liability
at September 30, $2018 \quad \$ \quad 1,864,526 \quad \$ \quad 2,182,564 \quad \$ \quad 2,551,326$
(Remainder of page intentionally left blank)

## I. POSTEMPLOYMENT BENEFITS OTHER THAN PENSION BENEFITS, Continued

For the fiscal year ended September 30, 2018, the System recognized OPEB expense of $\$ 337,808$. In addition, the System reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

| Description | Deferred Outflowsof Resources |  | Deferred Inflows of Resources |  |
| :---: | :---: | :---: | :---: | :---: |
| Differences between expected and actual experience | \$ | - | \$ | 64,546 |
| Change of assumptions |  | 427,540 |  | - |
| Net difference between projected and actual earnings on OPEB Plan investments |  | - |  | 102,326 |
| Total | \$ | 427,540 | \$ | 166,872 |

The OPEB Plan's deferred outflows of resources and deferred inflows of resources related to the System at September 30, 2018 will be recognized in OPEB expense of the System as follows:

| Fiscal Year Ending September 30: | Amount |  |
| :---: | :---: | :---: |
| 2019 | \$ | 15,435 |
| 2020 |  | 15,435 |
| 2021 |  | 15,435 |
| 2022 |  | 15,437 |
| 2023 |  | 41,017 |
| Thereafter |  | 157,909 |

## J. INSURANCE COVERAGE

The Board maintains a self-insurance program that provides for coverage of substantially all risks. Various excess catastrophe insurance policies with commercial carriers are also in force for claims exceeding the amount chargeable against the loss fund. The System participated in the self-insurance program during Fiscal Years 2018 and 2017 at an annual cost of $\$ 3,207,674$ and $\$ 2,928,310$, respectively. There have been no claim settlements in excess of insurance coverage during the three fiscal years ended September 30, 2018.

## J. INSURANCE COVERAGE, Continued

Additionally, the Board maintains a self-insured plan for employee medical benefits in which the System participates. The self-insurance plan covers all regular employees and certain retirees and former employees of the Board and their eligible dependents. In accordance with the Affordable Care Act, the lifetime maximum for a covered individual is unlimited.

## K. COMMITMENTS AND CONTINGENCIES

Outstanding commitments under operating and construction contracts for various projects totaled approximately $\$ 171.3$ million and $\$ 115.5$ million at September 30, 2018 and 2017, respectively.

The System is a party in various lawsuits and other claims incidental to the ordinary course of its operation, some of which are covered by the Board's self-insurance program. While the results of litigation cannot be predicted with certainty, management believes the final outcome of such litigation will not have a material adverse effect on the System's financial position.

## L. TRANSFERS OUT

As permitted under covenants of the Water and Wastewater Utility Revenue Bonds, Series 2016. The Board has adopted resolutions authorizing the System to make an annual transfer of surplus funds to the Board's General Fund, to be used for any lawful County purpose. Under these authorizations, the System transferred \$9,100,000 and \$8,200,000 in Fiscal Years 2018 and 2017, respectively, to the Board's General Fund.

## M. RESTATEMENT

As described in Note I, the System participates in the Orange County Healthcare Benefit Trust, a single-employer defined benefit OPEB Plan. In accordance with the implementation of GASB Statement No. 75, the System is required to report its share of the net OPEB liabilities and related deferred outflows and deferred inflows of the defined benefit OPEB Plan in which it participates. Implementation of this Statement resulted in a $\$ 2,057,067$ decrease in beginning net position at October 1, 2017 for the cumulative effect of the change in accounting principle. Fiscal Year 2017 financial statements have not been restated because it was not practical to determine the effect of the Statement for that period. Also, the beginning balances of related deferred outflows of resources and deferred inflows of resources were not reflected in the restated October 1, 2017 net position, since it was not practical to determine such balances.

## ORANGE COUNTY WATER UTILITIES SYSTEM

 SCHEDULE OF BUDGETED REVENUES AND EXPENSES COMPARED TO ACTUAL (NON-GAAP BUDGETARY BASIS*) for the year ended September 30, 2018|  |  | Budget |  | Actual |
| :---: | :---: | :---: | :---: | :---: |
| Operating revenues: |  |  |  |  |
| Wastewater service | \$ | 125,904,203 | \$ | 129,805,731 |
| Water service |  | 51,601,009 |  | 52,640,677 |
| Reclaimed water service |  | 8,652,329 |  | 9,333,545 |
| Miscellaneous |  | 9,797,611 |  | 7,241,109 |
| Total operating revenues |  | 195,955,152 |  | 199,021,062 |
| Operating and maintenance expenses: |  |  |  |  |
| Personal services |  | 54,397,638 |  | 53,305,549 |
| Contractual services |  | 46,272,950 |  | 34,932,940 |
| Materials and supplies |  | 8,003,917 |  | 7,408,301 |
| Utilities |  | 15,035,312 |  | 14,819,903 |
| Repairs and maintenance |  | 21,232,134 |  | 20,221,890 |
| Other expenses |  | 7,642,558 |  | 7,603,916 |
| Total operating and maintenance expenses |  | 152,584,509 |  | 138,292,499 |
| Operating income, budgetary basis* |  | 43,370,643 |  | 60,728,563 |
| Nonoperating revenues (expenses): |  |  |  |  |
| Interest revenue |  | 1,957,983 |  | 1,910,087 |
| Interest expense and fiscal charges |  | $(9,230,401)$ |  | $(4,345,230)$ |
| Total net nonoperating revenues (expenses) |  | $(7,272,418)$ |  | $(2,435,143)$ |
| Income before contributions and transfer, budgetary basis* |  | 36,098,225 |  | 58,293,420 |
| Capital contributions Transfer out |  | $\begin{gathered} 31,908,589 \\ (9,100,000) \\ \hline \end{gathered}$ |  | $\begin{gathered} 39,962,070 \\ (9,100,000) \\ \hline \end{gathered}$ |
| Change in net position, budgetary basis* | \$ | 58,906,814 | \$ | 89,155,490 |

*Budgetary basis, for purposes of this schedule, includes all budgeted items except for capital outlay, debt principal, beginning net position, non-cash developer donations and expense reserves.

## ORANGE COUNTY WATER UTILITIES SYSTEM BOND AND LOAN COVERAGE COMPUTATION September 30, 2018

The Board covenants in the bond resolution and State revolving loan agreements to own, control, operate and maintain the Water Utilities System in an efficient and economical manner, and to the extent possible, on a revenue-producing basis. The Board further covenants to fix, establish, maintain and collect rates, fees and other charges for the services of the Water Utilities System fully sufficient at all times:
(a) to produce net revenues (excluding connection fees) in each fiscal year which will equal at least $120 \%$ of the annual debt service requirement on all outstanding bonds, and
(b) to produce net revenues in each fiscal year which will equal at least $110 \%$ of the annual debt service requirement, and at the same time produce net revenues in each fiscal year which will equal at least $100 \%$ of the amounts required by the terms of the Resolution to be deposited in the Reserve Account.

The following represents the coverage computation for the year ending September 30, 2018:

| Gross operating revenues | \$ | 199,021,062 |
| :---: | :---: | :---: |
| Interest income, excluding interest on connection fees |  | 1,374,488 |
| Less operating and maintenance expenses |  | $(141,772,487)$ |
| Net operating revenues available for debt service |  | 58,623,063 |
| Less required deposits to specified accounts |  | $(1,697,742)$ |
| Net operating revenues available for debt service | \$ | 56,925,321 |
| Annual debt service requirement for bonds | \$ | 6,170,894 |
| Actual debt coverage (net operating revenues available for debt service divided by annual debt service) |  | 9.22 |
| Required debt coverage |  | 1.10 |
| Net operating revenues available for debt service less annual debt service requirement for bonds: | \$ | 50,754,427 |
| Annual debt service requirement for loans | \$ | 3,051,891 |
| Annual debt coverage for State Revolving Loans |  | 16.63 |
| Required debt coverage for loans |  | 1.15 |

# ORANGE COUNTY WATER UTILITIES SYSTEM 

## CUSTOMER STATISTICS, September 30, 2018 and 2017

## (Unaudited)

|  | 2018 | 2017 |
| :---: | :---: | :---: |
| Number of water accounts: |  |  |
| Residential | 142,384 | 138,593 |
| Commercial | 4,198 | 4,068 |
| Number of wastewater accounts: |  |  |
| Residential | 111,982 | 107,984 |
| Commercial | 2,641 | 2,566 |
| OUC billing (2) | 43,848 | 42,621 |
| Number of reclaimed accounts: |  |  |
| Residential | 25,512 | 23,054 (3) |
| Commercial | 1,994 | 1,915 (3) |
| Water consumption: (1) |  |  |
| Residential | 11,983,143 | 12,364,710 |
| Commercial | 8,724,628 | 8,506,683 |
| Wastewater consumption: (1) |  |  |
| Residential | 7,038,597 | 7,002,162 |
| Commercial | 7,450,035 | 7,109,524 |
| OUC billing (2) | 7,622,059 | 7,439,483 |
| Reclaimed consumption: (1) |  |  |
| Residential | 3,889,399 | 3,693,125 (3) |
| Commercial | 8,440,906 | 8,449,588 (3) |

(1) Water, wastewater, and reclaimed water consumption stated in thousands of gallons.
(2) OUC billing represents accounts billed for the System pursuant to an agreement with the Orlando Utilities Commission (OUC).
(3) Information for Fiscal Year 2017 has been updated from that previously reported.

