

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

FOR FISCAL YEAR ENDED  
SEPTEMBER 30, 2018

FLORIDA KEYS AQUEDUCT  
AUTHORITY

305-296-2454  
[www.fkaa.com](http://www.fkaa.com)

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# FLORIDA KEYS AQUEDUCT AUTHORITY



Prepared By:

Kerry G. Shelby, Deputy  
Executive Director and  
CFO

Cindy Kondziela, Manager  
of Finance

Finance Department

## COMPREHENSIVE ANNUAL FINANCIAL REPORT

For fiscal year ended September 30, 2018

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## VISION

THE FLORIDA KEYS AQUEDUCT AUTHORITY WILL BE RECOGNIZED NATIONALLY AS A LEADER IN THE PROVISION OF SAFE, RELIABLE WATER AND WASTEWATER SERVICES BY SEAMLESSLY INTEGRATING ADVANCED TECHNOLOGY TO ENHANCE THE CUSTOMER EXPERIENCE AND MAXIMIZE EFFICIENCIES, WHILE LEADING AS WELL IN ENVIRONMENTAL AWARENESS AND RESOURCE PROTECTION.

## MISSION STATEMENT

THE FLORIDA KEYS AQUEDUCT AUTHORITY IS A NATIONALLY RENOWNED AND COMMUNITY ORIENTED PUBLICLY OWNED UTILITY THAT PROVIDES RELIABLE SAFE AND EFFICIENT WATER AND WASTEWATER SERVICES IN A FISCALLY AND ENVIRONMENTALLY RESPONSIBLE MANNER WITH A HIGHLY TRAINED PROFESSIONAL AND DEDICATED TEAM OF EMPLOYEES.

## VALUES

TO ACHIEVE OUR MISSION, THE AUTHORITY IS COMMITTED TO THE FOLLOWING VALUES:

- CUSTOMER SATISFACTION
- EXCELLENT WATER QUALITY
- COMMUNITY INVOLVEMENT
- STRONG WORKING RELATIONSHIPS WITH MUNICIPAL, COUNTY, STATE AND FEDERAL GOVERNMENT AGENCIES
- EMPLOYEE DEVELOPMENT, COMMUNICATION AND CAREER GROWTH
- WELL MAINTAINED, RELIABLE AND SECURE SYSTEMS
- FINANCIAL STABILITY
- COST EFFECTIVE SERVICES
- PROTECTION OF ENVIRONMENTAL RESOURCES

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# INTRODUCTORY SECTION

Board of Directors

System Overview

Message from Executive Director

Message from Management

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**FOR FISCAL YEAR ENDED  
SEPTEMBER 30, 2018**

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## FLORIDA KEYS AQUEDUCT AUTHORITY

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### 2018 BOARD OF DIRECTORS

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#### J. ROBERT DEAN CHAIRMAN

**District 3-** Current term expires December 31, 2020

Owner and Director, Dean-Lopez Funeral Home

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#### RICHARD J. TOPPINO VICE CHAIRMAN

**District 2-** Current term expires December 31, 2022

Treasurer, Charley Toppino & Sons, Inc.

Vice President, Monroe Concrete Products, Inc.

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#### DAVID C. RITZ SECRETARY/ TREASURER

**District 5-** Current term expires December 31, 2020

President, Ocean Reef Community Association

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#### ANTOINETTE M. APPELL BOARD MEMBER

**District 4-** Current term expires December 31, 2020

Highly Qualified Paraprofessional with the

Monroe County School District

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#### CARA HIGGINS BOARD MEMBER

**District 1-** Current term expires December 31, 2022

Partner, Horan & Higgins LLP

# SYSTEM OVERVIEW

24 MGD LIME SOFTENING WATER  
TREATMENT PLANT

10 BISCAYNE AQUIFER SUPPLY WELLS

5 FLORIDAN AQUIFER SUPPLY WELLS

6 MGD BRACKISH WATER REVERSE  
OSMOSIS PLANT

2 SEAWATER REVERSE OSMOSIS PLANTS  
(3MGD TOTAL CAPACITY)

187 MILES OF STEEL AND DUCTILE IRON  
TRANSMISSION MAIN (18"-36") AT UP TO  
250 PSI

6 TRANSMISSION BOOSTER AND BACK  
PUMP STATIONS

43 BRIDGE CROSSINGS

49 MG CAPACITY IN 33 STORAGE TANKS

690 MILES OF POTABLE WATER  
DISTRIBUTION MAIN AT UP TO 55 PSI

26 PUMPING STATIONS

5 WASTEWATER TREATMENT PLANTS

195 MILES OF WASTEWATER  
COLLECTION AND FORCE MAIN LINES

14 APPROXIMATE MILES OF RECLAIMED  
DISTRIBUTION WATER LINES



## Message from the Executive Director

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**KIRK ZUELCH**



On behalf of the Board of Directors and staff of the Florida Keys Aqueduct Authority, I am pleased to submit this Comprehensive Annual Financial Report for our fiscal year ended September 30, 2018.

The Authority remains in sound financial condition, both from a net revenue and a liquidity standpoint. Water volume sales have increased slightly for the past four years due to an increase in development and an improving tourist economy in the Keys. Operating expenses have increased slightly, mainly due to rising operating costs related to newly constructed wastewater systems.

The Authority continues its partnership with Monroe County in constructing and operating wastewater systems on the County's behalf. A regional system serving Cudjoe Key and adjoining islands that serves approximately 8,800 connections is in service and the Authority is continuing work on the collection system. This large project, financed and paid for by Monroe County, will be the last significant component of the initiative to provide wastewater collection and treatment to all the islands of the Keys.

On September 10, 2017 Hurricane Irma made landfall in the lower keys as a Category 4 storm. This event left substantial damage to the area and to the Authority's water distribution system. This damage was repaired and the system returned to normal operations in the first quarter of this fiscal year. The Authority is working with its insurance carriers and the Federal Emergency Management Agency (FEMA) for reimbursements for some of this damage.

I hope this Comprehensive Annual Financial Report is informative and useful to you. Budgets and other financial information are available at our website, [fkaa.com](http://fkaa.com).

Sincerely,

Respectfully submitted,

A handwritten signature in black ink that reads "Kirk C. Zuelch". The signature is written in a cursive style.

Kirk Zuelch

Executive Director

April 11, 2019

## Message from Management

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Florida Statutes require that government entities submit to the Auditor General a complete set of financial statements presented in conformity with U.S. generally accepted accounting principles (GAAP) and audited in accordance with U.S. generally accepted auditing standards and government auditing standards by a firm of licensed certified public accountants and submitted to the Auditor General of the State of Florida within the earlier of 45 days after the completion of the audit report but no later than 9 months after the close of each fiscal year. Pursuant to that requirement, we are pleased to issue this Comprehensive Annual Financial Report of the Florida Keys Aqueduct Authority (the Authority) for the fiscal year ended September 30, 2018.

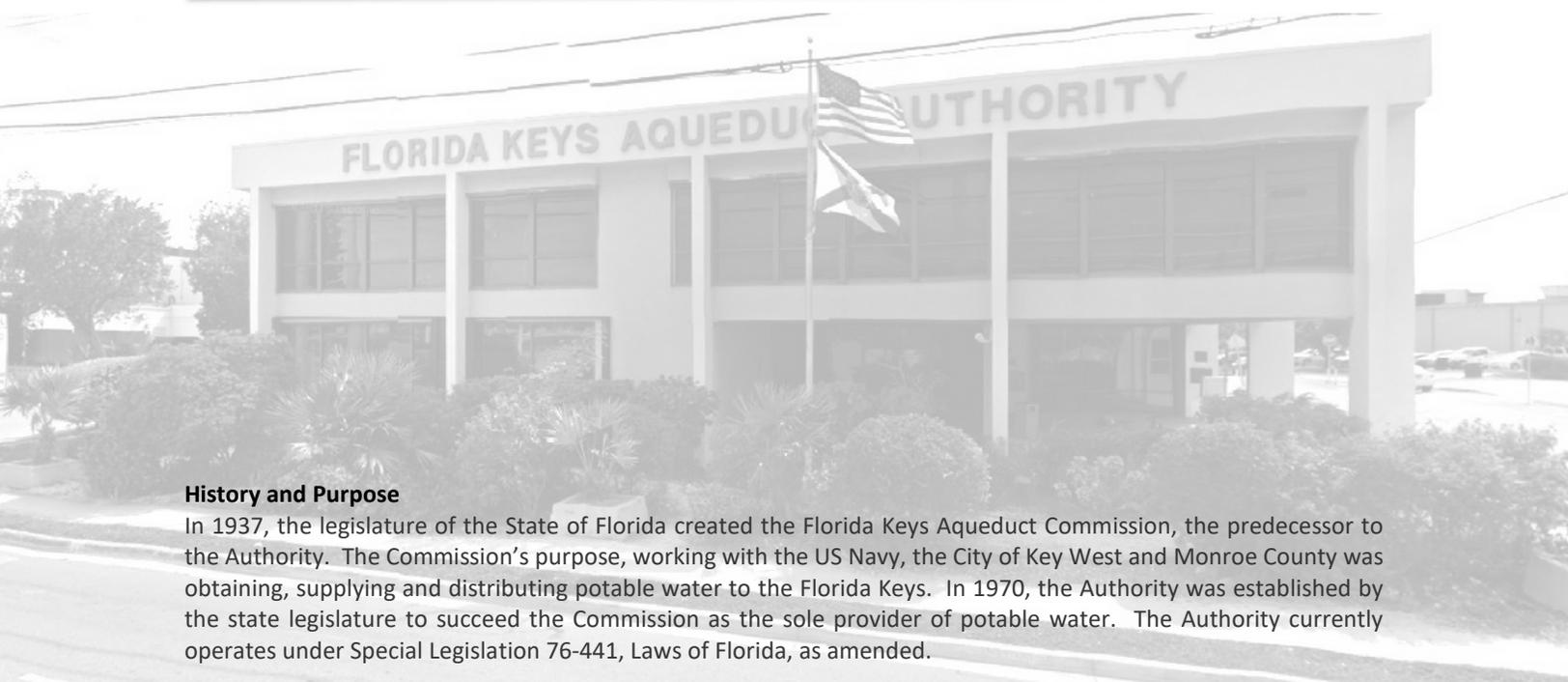
This report consists of management's representations concerning the finances of the Authority. Consequently, management assumes full responsibility for the completeness and reliability of all information presented in this report. To provide a reasonable basis for making these representations, management of the Authority has established a comprehensive internal control framework that is designed both to protect its assets from loss, theft, or misuse and to compile sufficient reliable information for the preparation of the Authority's financial statements in conformity with GAAP. Because the cost of internal controls should not outweigh their benefits, the Authority's comprehensive framework of internal controls has been designed to provide reasonable rather than absolute assurance that the financial statements will be free from material misstatement. As management, we assert that, to the best of our knowledge and belief this financial report is complete and reliable in all material respects.

The Authority's financial statements have been audited by Marcum LLP, Certified Public Accountants. The goal of the independent audit was to provide reasonable assurance that the financial statements of the Authority for the fiscal year ended September 30, 2018 are free of material misstatement. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluating the overall financial statement presentation. The independent auditor concluded, based upon the audit, that there was a reasonable basis for rendering an unmodified opinion that the Authority's financial statements for the fiscal year ended September 30, 2018 are fairly presented in conformity with GAAP. The independent auditors' report is presented as the first component of the financial section of this report.

GAAP requires that management provide a narrative introduction, overview, and analysis to accompany the financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The Authority's MD&A can be found immediately following the report of the independent auditors.

## Profile Of The Authority

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### History and Purpose

In 1937, the legislature of the State of Florida created the Florida Keys Aqueduct Commission, the predecessor to the Authority. The Commission's purpose, working with the US Navy, the City of Key West and Monroe County was obtaining, supplying and distributing potable water to the Florida Keys. In 1970, the Authority was established by the state legislature to succeed the Commission as the sole provider of potable water. The Authority currently operates under Special Legislation 76-441, Laws of Florida, as amended.

The Authority provides potable water for over 50,000 customers in the Florida Keys, a series of islands at the southern tip of the Florida peninsula. The Authority also provides wastewater collection and treatment in certain areas of the Florida Keys. The Florida Keys extend approximately 130 miles from the Florida mainland and are connected by 43 bridges. The reporting entity consists of the operations of the water and wastewater utility.

The Authority is governed by a five-member board of directors appointed by the Governor of the State of Florida from districts identical to the county commission districts in Monroe County. Members serve four-year terms. The board employs an executive director who is the chief executive officer of the Authority.

### Budgetary Control

In accordance with the Authority's enabling legislation, the board holds public hearings and subsequently adopts an annual budget at least 30 days prior to the beginning of its fiscal year. The budget is adopted on a basis consistent with GAAP except no amounts are provided for non-cash expenses such as depreciation, amortization and post-retirement benefits. The budget is monitored at various levels of detail by management. Total expenditures may not legally exceed the total budget, as adopted, without amendment by the board.

## The Authority's Facilities

The Authority has made significant improvements to its infrastructure over the years to provide expanded service and accommodate increased demand. The majority of the original transmission line constructed in the 1940s by the US Navy was replaced in the early 1980s. The Authority then established a long-range capital improvement master plan to address anticipated future water demands. This master plan was expanded to include wastewater projects in 1998 and updated in 2006 in conjunction with the development of a strategic water supply plan that identifies future water supplies.

An overview of the Authority's facilities follows.

## **Profile Of The Authority (continued)**

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### **Well Fields**

The Authority draws its primary raw water supply from the Biscayne Aquifer through ten wells with average depths of fifty to sixty feet and five Floridan Aquifer wells with depths of about 1,500 feet. The well field is adjacent to the outskirts of Everglades National Park and is within an environmentally protected pine rockland. The location of the well field, along with restrictions enforced by state and local regulatory agencies, contribute to the unusually high quality of the raw water, which meets all federal and state finished drinking water standards prior to any treatment.

The Authority is permitted by the South Florida Water Management District (SFWMD) to withdraw its supply of raw water. The Authority's water use permit allows for an average daily withdrawal from the Biscayne Aquifer of 19.93 mgd and a maximum daily withdrawal of 23.79 mgd. However, the permit contains certain limitations in the event of severe drought. The permit also allows the Authority to withdraw up to 8 mgd of brackish water from the deeper Floridan aquifer to treat through reverse osmosis. The permit is effective until 2028, but the Authority may request additional allocations if the water supply is insufficient.

### **Water Production and Treatment Facilities**

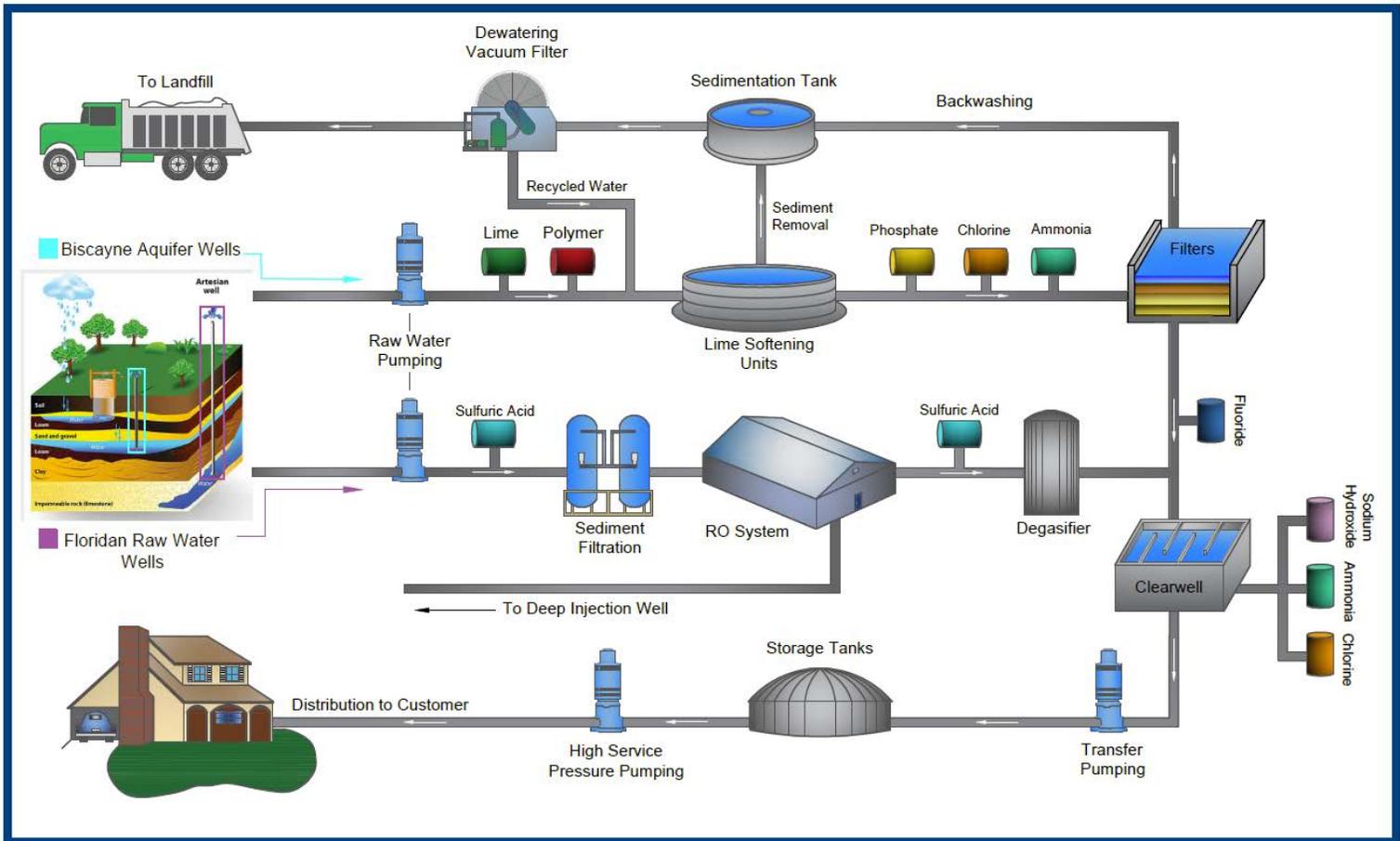
The Authority's primary water production facilities are a lime softening plant that treats water withdrawn from the Biscayne Aquifer and a reverse osmosis plant that treats brackish water withdrawn from the deeper Floridan Aquifer. Water treated at these two facilities is then blended and disinfected before entering the transmission line. The lime softening plant has an ultimate design production capacity of 23.79 million gallons per day (mgd). The water treatment process consists primarily of lime softening, filtration, disinfection and fluoridation. The reverse osmosis plant has a design capacity of 6 mgd. Brackish water is forced through membranes to remove chlorides and impurities. Adjacent to these treatment facilities are water storage tanks, high service pumping equipment, emergency diesel generators, a control center for transmission telemetry, and a state-certified water quality testing laboratory. The Authority also maintains seawater reverse osmosis facilities in Stock Island and Marathon capable of producing 2 mgd and 1 mgd, respectively. These facilities were constructed primarily for emergency operations in the event of a major transmission main interruption.

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## Profile Of The Authority (continued)

### Water Production and Treatment Facilities (continued)

The following diagram illustrates the water treatment process.



## **Profile Of The Authority (continued)**

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### **Water Transmission and Distribution Systems**

The Authority maintains approximately 187 miles of transmission main and approximately 690 miles of distribution lines. The transmission main ranges in size from 36 inches leaving the water treatment plant in Florida City to 18 inches at the end of the line in Key West and in areas with redundant lines. The Authority operates transmission pump stations at the water treatment plant in Florida City, Key Largo, Long Key, Marathon, and Ramrod Key. These pump stations boost the water pressure to meet water demands throughout the service area. A pumping station on Stock Island just outside of Key West can also pump water in the other direction in the event of a line break. The stations have pumps with electric variable speed drives as well as diesel engine drives for emergencies. The Authority also operates 20 distribution pump stations located throughout the service area to maintain water pressure in the distribution system.

### **Wastewater Treatment Facilities**

The Authority owns and operates wastewater treatment facilities in Bay Point, Duck Key and Layton, Florida. Additionally, the Authority operates facilities in Big Coppitt and Cudjoe Key that are owned by Monroe County. The Authority and Monroe County (the County) are parties to an interlocal agreement that provides for the Authority to operate and maintain county-owned wastewater systems for a period of 99 years, including setting rates sufficient to fund those operations. The Authority and the County continues work on a regional collection system connecting to the Cudjoe Key plant in the lower keys that serves about 10,500 customers.

### **Wastewater Transmission and Collection Systems**

The Authority's wastewater collection systems are comprised of gravity, low pressure and vacuum systems. There are also transmission force mains that carry the influent from the collection systems to the wastewater treatment facilities.

### **Reclaimed Water Distribution Systems**

The Authority has reclaimed water lines that supply non-potable water from effluent produced by wastewater treatment facilities to all of Duck Key and limited areas of Big Coppitt Key and Shark Key.

## **The Authority's Operations**

### **Engineering and Operations**

The Authority's engineering group is responsible for implementing the Authority's capital improvement plan, coordinating and inspecting construction projects, assessing system development fees, designing in-house distribution projects, and maintaining drawings and records of the Authority's systems. The Authority maintains system data on a geographic information system (GIS), which stores infrastructure attributes and other relevant data based on physical geographic location. This data includes, among other things, the size and type of pipe, valves, meters, fire hydrants, vacuum pits, lift stations and other system components as well as the date the component was installed.

Due to the linear geography of the Florida Keys, operations crews and facilities must be located throughout the service area. In addition to operating the system, these crews respond to line breaks and other service interruptions, perform scheduled preventive maintenance and leak surveys, and maintain facilities and structures. For optimal response to any service request, the Authority maintains a materials inventory of over 2,190 items in three warehouses throughout the service area to draw upon in case of emergency.

## **Profile Of The Authority (continued)**

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### **Water Quality**

The water quality team is responsible for assuring that the Authority's water supply meets the highest quality standards possible for safety, aesthetics and taste. The Authority employs staff that is certified in the treatment, testing, monitoring and distribution of the water supply. Water is tested regularly, both prior to and after treatment to ensure that it complies with or surpasses all federal and state water quality requirements. An annual consumer confidence report is provided to Authority customers each year. See the statistical section of this report for drinking water quality standards and analyses included in the current consumer confidence report.

Protection of the groundwater source from potential pollution is a very important water quality issue. The Authority has entered into an ongoing agreement with the Miami-Dade County Department of Environmental Resource Management (DERM) to regulate and manage issues relating to the protection of the Authority's well field. DERM monitors ground and surface water to establish water quality trends, enforces laws against illegal discharges, protects important aquifer recharge areas, and regulates underground storage tanks, liquid waste haulers and other hazardous waste.

The Authority monitors, on a monthly basis, a network of wells and structures for salt water intrusion. This network includes thirteen Authority-owned wells and three United States Geological Survey wells. These sixteen sites provide valuable information on the location, movement and velocity of the saline/fresh water interface.

The Authority uses chloramines as its primary disinfecting agent. Chloramines, though not as strong as free chlorine, remain more stable and do not produce potentially harmful by-products. The Authority performs bacteriological testing monthly on samples taken from approximately 100 sample sites throughout the system to ensure that appropriate disinfection is taking place. In the state of Florida, water utilities are required to establish an ongoing cross-connection control program to detect and prevent cross-connections that may create a potential health hazard. A cross-connection is any physical connection between the water supply and any private piping arrangement that contains a foreign liquid or substance. To prevent potential backflow from such an arrangement, the Authority must either discontinue water service until the cross-connection is eliminated or require the installation of an approved backflow prevention device.

### **Information Technology**

The Authority's Information Technology group is responsible for all business software, telephone and radio networks and the data information network that runs the length of the system. This group is also responsible for implementing the technology master plan. This plan provides a strategy for future changes and improvements to the Authority's technology infrastructure over the next five to ten years.

### **Customer Service and Administration**

The Authority has customer service locations in Key West, Marathon and Tavernier, Florida. Customer service representatives are available at each location to initiate service, collect monthly payments and assist customers with service requests. However, about 80% of customers pay their bills electronically through either automatic payment, online payments or through an automated phone system. Customer service representatives read water meters through radio transmissions either remotely or from a service vehicle in the field. The Authority's administrative offices, including the executive office, human resources, finance, billing and purchasing, are located in Key West.

## **Factors Affecting Financial Condition**

The information presented in the financial statements is best understood when it is considered from the broader perspective of the specific environment within which the Authority operates.

## Profile Of The Authority (continued)

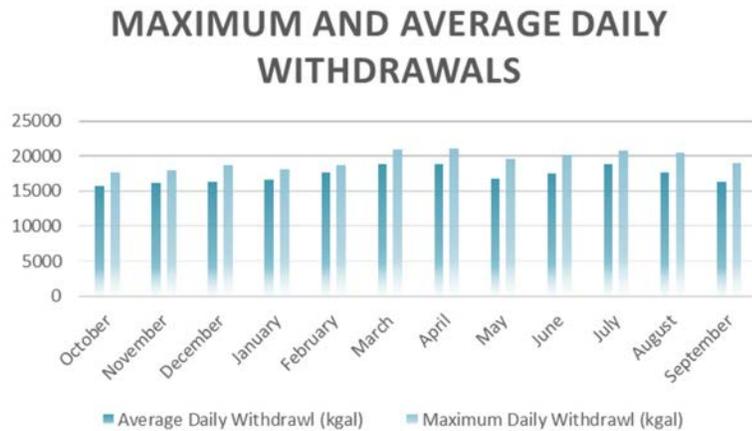
### Local Economy and Demand Trends

The primary industries in the Authority’s service area are related to tourism. Other industries include military operations, government and commercial fishing. Many residents are in the service area for only part of the year. The permanent year-round population of Monroe County is approximately 74,000 residents. The average functional population, defined as the sum of the permanent population and the peak seasonal population, is estimated by the Monroe County Growth Management Division to be approximately 150,000. Therefore, the demands on the water system are highly seasonal.

Water demand hit a ten year low in 2010 but has shown increases in recent years as the economy recovered. The tourist economy is strong and development is increasing after a period of dormancy. Unemployment is among the lowest in the state of Florida.

Monroe County has one of the lowest water consumption levels per capita in the state of Florida. The primary reasons are that customers are accustomed to conserving water due to the historically limited supply and in response to frequent severe drought conditions in South Florida. Customers are also using less to save on monthly utility bills now that many have a wastewater charge for the first time.

The graph below shows the maximum and average day withdrawals from the Biscayne aquifer in fiscal year 2018. Due to severe drought conditions that occur in South Florida from time to time, permanent mandatory water use restrictions from the South Florida Water Management (SFWMD) are now in place.



The Florida Keys were significantly impacted by Hurricane Irma on September 10, 2017. The storm caused damage to many homes, boats and structures, primarily in the lower and middle keys. Falling trees caused extensive damage to the Authority’s distribution system and interrupted water service for up to eleven days in some of the hardest hit areas. The storm has also had a negative effect on tourism while the Keys recovered. This impacted revenue and expenses for the first quarter of fiscal year 2018.

### Long-Range Financial Planning

The Authority’s capital improvement plan is projected to require about \$124.2 million over the next five years. Most of these projects are either improvements to aging infrastructure or new technologies to improve efficiency and reliability of the system. The Authority anticipates funding these improvements with system development fees, bond proceeds, grants and rate revenue.

## **Profile Of The Authority (continued)**

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The Authority's current rate structure has a base facility charge that provides revenue stability independent of water usage and offsets some of the fixed costs incurred to maintain service for all potential users of the system. Inverted rate blocks for water flows were designed to discourage excessive consumption and encourage further water conservation. Single family residential wastewater customers are only billed for flows up to 10,000 gallons per month. All rates are indexed each year to compensate for inflation.

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## FCAA Awards

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### **Certificate of Achievement for Excellence in Financial Reporting**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the Authority for its comprehensive annual financial report for the fiscal year ended September 30, 2017. This was the 27th consecutive year that the Authority has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements. The Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

### **Distinguished Budget Presentation Award**

The GFOA awarded the Florida Keys Aqueduct Authority the Distinguished Budget Presentation Award for fiscal year beginning October 1, 2018. This was the 12<sup>th</sup> consecutive year that the Authority has achieved this award. In order to receive the budget award, the entity must satisfy nationally recognized guidelines for effective budget presentation. These guidelines are designed to assess how well an entity's budget serves as a policy document, a financial plan, an operations guide and a communications device. The budget must be rated proficient in all four categories to receive the award.



## Acknowledgements

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The preparation of this comprehensive annual financial report was made possible by the dedicated service of the entire staff of the Authority. Each participant has our sincere appreciation for the contributions made in support of this report.

Respectfully submitted,



Kerry G. Shelby, CPA  
Deputy Executive Director and CFO



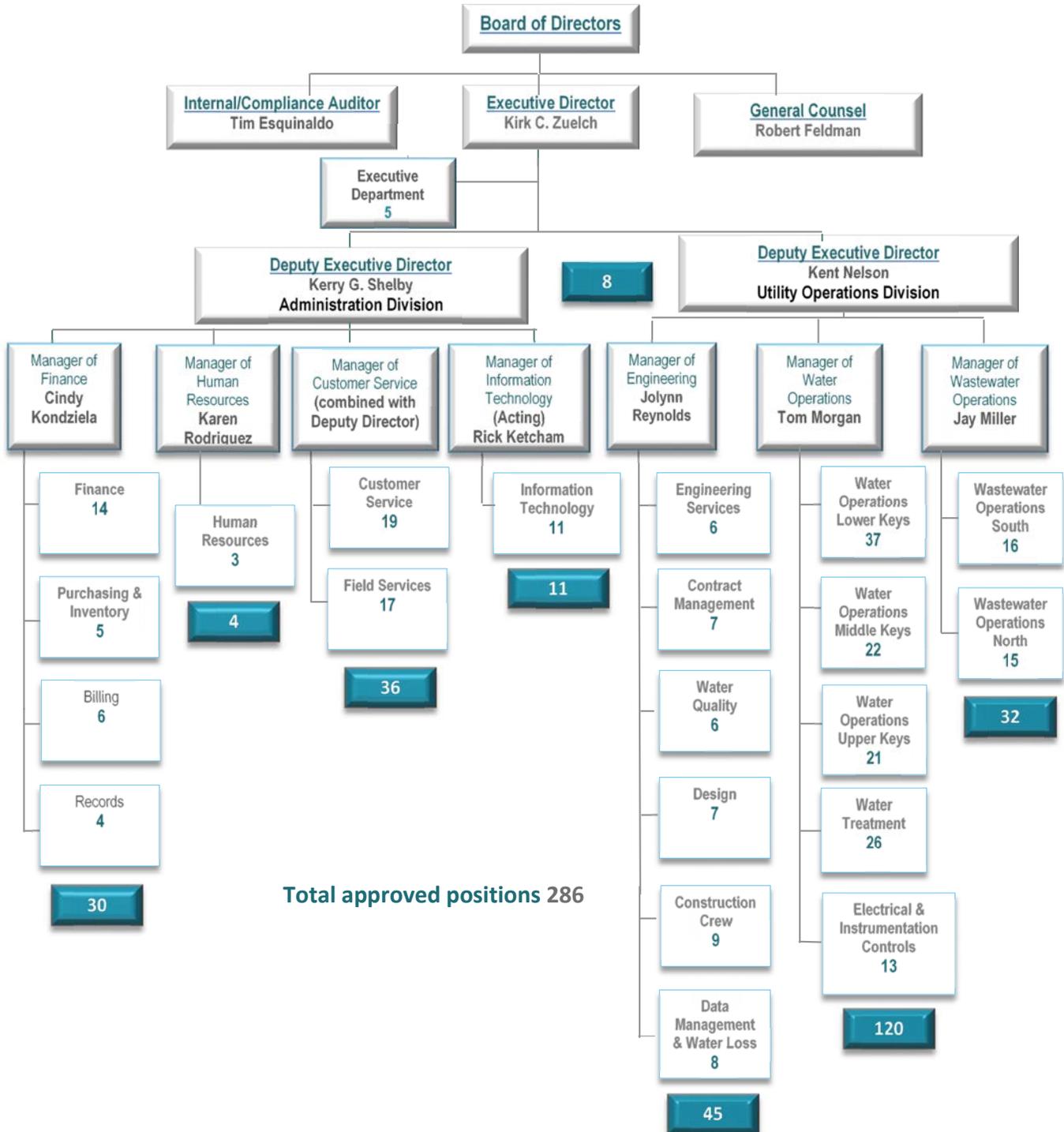
Kirk Zuelch  
Executive Director

April 11, 2019

## Organization Chart

### ORGANIZATION CHART

FOR FISCAL YEAR 2018



# FINANCIAL SECTION

Independent Auditors' Report

Managements Discussion and Analysis

Financial Statements

Notes To Financial Statements

Required Supplementary Information

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**FOR FISCAL YEAR ENDED  
SEPTEMBER 30, 2018**

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## Independent Auditors' Report

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### INDEPENDENT AUDITORS' REPORT

To the Audit Committee, Board of Directors and Executive Director  
**Florida Keys Aqueduct Authority**

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

We have audited the accompanying financial statements of the Florida Keys Aqueduct Authority (the Authority) which comprise the statement of net position as of September 30, 2018, and the statements of revenues, expenses and changes in net position and cash flows for the fiscal year then ended, and the related notes to the financial statements.

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

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

#### ***Auditors' Responsibility***

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to 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.



## **Independent Auditors' Report (continued)**

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### ***Opinion***

In our opinion, the 2018 financial statements referred to above present fairly, in all material respects, the respective financial position of the Authority, as of September 30, 2018, and the respective changes in financial position and cash flows thereof for the fiscal year then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Other Matters***

#### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 29 to 35 and the schedule of changes in total OPEB liability and related ratios, the schedules of the Authority's proportionate share of net pension liability and schedules of the Authority's contributions on pages 70 and 71, respectively, be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### *Other Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Authority's financial statements. The information identified in the table of contents as the Introductory and Statistical Sections, are presented for purposes of additional analysis and are not a required part of the financial statements.

The Introductory and Statistical sections have not been subjected to the auditing procedures applied in the audit of the financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

#### *Prior Year Comparative Information*

We have previously audited the Authority's 2017 financial statements, and our report dated March 6, 2018, expressed an unmodified opinion on those financial statements. In our opinion, the summarized comparative information presented herein as of and for the fiscal year ended September 30, 2017, is consistent, in all material respects, with the audited financial statements from which it has been derived.

## **Independent Auditors' Report (continued)**

### ***Other Reporting Required by Government Auditing Standards***

In accordance with Government Auditing Standards, we have also issued our report dated April 11, 2019 on our consideration of the Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is 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 Authority'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 Authority's internal control over financial reporting and compliance.

*Marcum LLP*

Miami, FL

April 11, 2019

## Management's Discussion and Analysis

---

Our discussion and analysis of the Authority's financial performance provides an overview of the Authority's financial activities for the fiscal year ended September 30, 2018. Please read it in conjunction with the transmittal letter and the Authority's financial statements.

### Highlights

#### Financial highlights

- ✓ The Authority's net position decreased by 2% in 2018. See the analysis of net position on the following page.
- ✓ Operating revenue increased by \$1.6 million in 2018, 3% over 2017 while operating expenses, before depreciation, decreased by 7% in 2018.
- ✓ The effect of the implementation of GASB No. 75 on net position as previously reported as of September 30, 2017 is a decrease in net position of \$8,353,827. The adjustment is reflected in Table 2- Summary of Changes in Net Position.

#### Authority highlights

- ✓ The Authority and Monroe County are nearing completion of the County-wide wastewater infrastructure project that has been underway for over 20 years.
- ✓ The Authority's capital improvement plan focuses on projects that can improve system resiliency, such as expanded remote water-producing plants and replacement of older, less reliable transmission lines for key bridge crossings.
- ✓ Parts of the Authority's service area were significantly impacted by Hurricane Irma on September 10, 2017. These impacts were felt throughout most of 2018, particularly early in the fiscal year.

### Using This Annual Report

This annual report consists of four parts; introductory, financial, statistical, and reporting sections. The financial section also includes notes that explain in more detail some of the information underlying the financial statements.

### Required financial statements

The financial statements of the Authority report information about the Authority using accounting methods similar to those used by private sector companies. These statements offer short-term and long-term financial information about its activities. The statement of net position includes all of the Authority's assets, deferred outflows of resources, liabilities, deferred inflows of resources and provides information about the nature and amounts of investments in resources (assets) and obligations to creditors (liabilities). It also provides the basis for computing rate of return, evaluating the capital structure of the Authority and assessing the liquidity and financial flexibility of the Authority. All of the current year's revenue and expenses are accounted for in the statement of revenue, expenses, and changes in net position. This statement measures the success of the Authority's operations over the past year and can be used to determine profitability, credit worthiness and whether the Authority has successfully recovered all its costs through its user fees and other charges. The third required financial statement is the statement of cash flows. The statement reports cash receipts, cash payments, and net changes in cash resulting from operations, investing, capital and related financing activities and noncapital financing activities and illustrates the sources of the Authority's cash, how it is spent and the change in total cash during the reporting period.

## Management's Discussion and Analysis (continued)

### Financial Analysis of the Authority as a Whole

The statement of net position, and the statement of revenue, expenses and changes in net position report information about the Authority's activities in a way that helps answer the question of whether the Authority, as a whole, is better or worse off as a result of those activities. These statements report the net position of the Authority and changes in them. The Authority's net position - the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources - is one way to measure its financial health. Over time, increases or decreases in net position are indicators of whether its financial health is improving or deteriorating. However, other non-financial factors such as changes in economic conditions, population growth, and new or changed legislation must be considered as well.

The Authority's net position decreased by 2% in 2018. Our condensed analysis below focuses on the Authority's net position (Table 1) and changes in net position (Table 2) during the fiscal year.

**Table 1**

	2018	2017
Current and other assets	55,032,639	63,965,885
Capital assets	268,887,188	267,802,411
Total assets	323,919,827	331,768,296
Total deferred outflow of resources	34,357,301	37,260,131
Current liabilities	22,575,209	24,144,525
Long-term liabilities	199,422,187	198,500,663
Total liabilities	221,997,396	222,645,188
Total deferred inflow of resources	3,181,320	1,678,306
Net investment in capital assets	133,016,908	130,534,404
Restricted	7,914,822	5,608,343
Unrestricted	(7,833,318)	8,562,186
<b>Total net position</b>	\$ 133,098,412	\$ 144,704,933

Net investment in capital assets increased 2% in 2018 due to additional wastewater equipment. Long-term liabilities decreased by over 3% in 2018 primarily due to a decrease in debt and the derivative instruments-swap liability. Other liabilities decreased 7% due to accounts payable and wage and benefit accruals.

## Management's Discussion and Analysis (continued)

### Summary of Changes in Net Position

Table 2

	2018	2017
Utility revenue water	\$ 48,659,692	\$ 47,574,035
Utility revenue reclaimed water	124,160	118,515
Utility revenue wastewater	8,840,779	8,198,720
Other operating revenue Navy	3,942,576	3,911,798
Other operating revenue	1,779,256	1,822,824
Operating revenues	<u>63,346,463</u>	<u>61,625,892</u>
Less abatements	<u>(412,240)</u>	<u>(352,776)</u>
Total operating revenues	<u>62,934,223</u>	<u>61,273,116</u>
Operating expenses	<u>(64,923,944)</u>	<u>(60,257,703)</u>
Net operating income (loss)	<u>(1,989,721)</u>	<u>1,015,413</u>
Non-operating revenue (expenses)		
Interest income	690,101	447,002
Other income	907,884	605,192
Interest expense	(5,876,885)	(5,862,932)
Other expenses	<u>(717,981)</u>	<u>(1,657,169)</u>
Total non-operating revenue (expenses)	<u>(4,996,881)</u>	<u>(6,467,907)</u>
Net loss before contributions	<u>(6,986,602)</u>	<u>(5,452,494)</u>
Capital contributions	<u>3,733,908</u>	<u>7,743,049</u>
Change in net position	<u>(3,252,694)</u>	<u>2,290,555</u>
Net position, beginning of year (as previously reported)	<u>144,704,933</u>	<u>142,414,378</u>
Prior period adjustment	<u>(8,353,827)</u>	<u>-</u>
Net position, beginning of year (restated)	<u>136,351,106</u>	<u>-</u>
<b>Net position at end of year</b>	<u>\$ 133,098,412</u>	<u>\$ 144,704,933</u>

Utility water revenue increased 2% in 2018 due largely to the recovery of Hurricane Irma. Wastewater revenue increased 7% due to additional customer connections from Cudjoe Regional wastewater system. Reclaimed water increased 5% again due to Hurricane Irma recovery. Other operating Navy revenue increased 1%. Other operating revenue increased 3% due to the recovery of Hurricane Irma. Interest income increased 35% due to higher interest rates and increased rates on long-term investments. Operating expenses decreased 5% in 2018 due to the implementation of GASB 75 and an increase in pension expense and distribution and electrical instrumentation repair expenses, including workforce labor, due to Hurricane Irma. Interest expense increased due to the amortization of Navy wastewater purchase. Other expenses decreased 57% due to the prior year's new bond issues and a permanent asset impairment charge due to damages caused by Hurricane Irma. The implementation of GASB No. 75 resulted in a prior period adjustment decreasing net position by \$8,353,827.

### The Authority's Fund

The Authority's fund is a proprietary fund, which is accounted for similar to a private business. All activities of the Authority are included in this fund.

## Management's Discussion and Analysis (continued)

### Capital Assets and Debt

#### Capital assets

At the end of 2018, the Authority had approximately \$268.8 million invested in a broad range of water and wastewater capital assets, including several projects under construction. This amount represents a net increase (including additions, deductions and depreciation) of approximately \$1 million.

The following table summarizes the Authority's capital assets, net of accumulated depreciation, for the fiscal years ended September 2018 and 2017.

	<b>2018</b>	<b>2017</b>
<b>Land</b>	\$ 8,285,155	\$ 8,285,155
Buildings, structures & improvements	36,371,381	37,640,888
Equipment, vehicles, furniture & fixtures	7,032,363	7,171,693
Transmission system	34,273,762	31,434,221
Water distribution system	95,338,056	95,572,600
Water meters	4,309,454	4,562,151
Water storage facilities	4,802,171	4,974,217
Pump station equipment	12,264,071	12,309,183
Water treatment equipment	15,461,600	16,329,108
Reverse osmosis equipment	14,002,961	16,160,439
Computer equipment	648,897	826,199
Wastewater treatment equipment	4,833,919	4,740,681
Wastewater collection equipment	15,084,298	7,603,370
Reclaimed water	4,333,483	4,419,628
	<b>257,041,571</b>	<b>252,029,533</b>
<b>Construction work in progress</b>	<b>11,845,617</b>	<b>15,772,878</b>
	<b>\$ 268,887,188</b>	<b>\$ 267,802,411</b>

The following table summarizes the changes in capital assets. These changes are presented in detail in Note 4 to the financial statements.

	<b>2018</b>	<b>2017</b>
Balance at beginning of year	\$ 267,802,411	\$ 265,297,646
Additions	20,846,319	18,748,947
Retirements	(4,082,812)	(2,945,086)
Depreciation	(15,394,595)	(15,495,344)
Accumulated depreciation retired	3,643,126	1,937,457
Net increase (decrease) in construction work in progress	(3,927,261)	258,791
<b>Balance at end of year</b>	<b>\$ 268,887,188</b>	<b>\$ 267,802,411</b>

## **Management's Discussion and Analysis (continued)**

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This year's major additions to utility plant included:

• Water distribution system upgrades	2.8 million
• Water transmission system upgrades	4.7 million
• Water pump station equipment	1.0 million
• Equipment, vehicles furniture and fixtures	1.9 million
• Wastewater equipment and collection system	8.4 million

The Authority's 2019 capital budget plans for investing approximately \$9.4 million in capital projects, including the following:

• Water distribution system upgrades	\$2.8 million
• Wastewater system upgrades	.7 million
• Water transmission system upgrades	5.9 million

The Authority plans to finance capital projects primarily with cash reserves and the issuance of revenue bonds.

### **Long-term liabilities**

At September 30, 2018, the Authority had a total of approximately \$133 million in water and wastewater bonds outstanding. The Authority's water bonds have underlying ratings of Aa3 by Moody's, A+ by Standard & Poor's and AA- by Fitch. Water and wastewater bonds held by a bank are not rated. In conjunction with the issuance of the Series 2006 bonds (later refunded by Series 2008), the Authority entered into a derivative contract with a counterparty that is considered to be an effective hedging instrument. As such, that instrument is recorded as a long-term liability, along with a complementary deferred outflow of resources on the Authority's statement of net position.

The Authority has a contract with the U.S. Navy to own and manage water distribution and wastewater treatment infrastructure serving Naval Air Station Key West and associated residential properties. This acquisition resulted in a credit due to the Navy that is applied against charges under this contract. The credit is being amortized over twenty years at 4.9% for water and fifty years at 5.0% for wastewater.

## Management’s Discussion and Analysis (continued)

Long-Term Liabilities are as follows:

	<b>2018</b>	<b>2017</b>
Water and wastewater bonds, net	\$ 132,703,366	\$ 137,071,540
Derivative instrument - swap	7,382,211	10,838,557
Credit due to US government	27,827,110	28,764,756
Compensated absences	3,029,626	3,052,156
Net OPEB obligation	-	2,675,695
Total OPEB liability	11,087,540	-
Net pension liability	23,155,544	21,708,995
<b>Total long-term liabilities</b>	<b>\$ 205,185,397</b>	<b>\$ 204,111,699</b>

Compensated absences include estimated accrued vacation and sick leave to be paid at retirement. Net other post-employment benefits (OPEB) obligation, which was replaced in fiscal year 2018 by the total OPEB liability, represents the actuarial value of the unfunded liability of the Authority’s other post-employment benefits due to employees and retirees. More detailed information about the Authority’s long-term liabilities is presented in Notes 5, 10 and 11 to the financial statements.

### Economic Factors, Next Year’s Budget and Rates

The economy within the service area continued to improve in 2018 with the lowest unemployment rate in the state and strong tourism. However, the impacts of Hurricane Irma in September 2017 resulted in a dip in revenue as tourism slowed during the recovery period. With little damage to infrastructure in Key West, the Keys actively marketed itself again and tourism rebounded. Real estate and tourism remains strong with an active market.

Water, wastewater and reclaimed water rates were increased on October 1, 2018 by the annual inflation adjustment of 4.2%. An additional rate increase of 3% was applied to water services for funding in correlation with the Authority’s 2019 five year capital improvement plan.

The Authority’s capital improvement plan calls for capital expenditures of about \$124.2 million over the next five years. These expenditures will be funded primarily through existing cash reserves, grants, rate revenue and proceeds for the issuance of revenue bonds. Projects can be deferred or removed from the plan at any time at the discretion of the Authority’s board of directors.

The Authority’s permit to withdraw water from the Biscayne Aquifer is limited. In order to ensure its ability to meet demand despite these limitations, the Authority has constructed a 6 mgd reverse osmosis plant in Florida City. Treating brackish water through reverse osmosis requires substantially more energy than that required by the lime softening process. Therefore, an increase in operating costs is anticipated should this plant be used as a primary source of supply. The expected use of this plant will be considered each year as part of the budget process.

The Authority continues to move ahead with wastewater initiatives in the Florida Keys. The Authority and Monroe County entered into an interlocal agreement in 2005 that established a partnership for completing the construction

## **Management's Discussion and Analysis (continued)**

of wastewater infrastructure in the Authority's service area. The Authority currently has about 10,500 wastewater customers and the system is nearing completion.

The Florida Keys continue to be at risk for future impacts from hurricanes. While no funds are historically budgeted for these impacts, the possibility does exist. If damages are incurred, the board of directors may be asked to consider a budget amendment to pay for those damages.

### **Contacting the Authority's Financial Management**

This financial report is designed to provide our customers and our creditors with a general overview of the Authority's finances and to demonstrate the Authority's accountability for the money it receives. If you have questions about this report or need additional financial information, visit our website at [www.fkaa.com](http://www.fkaa.com) or contact the Authority at 305.296.2454.

## Financial Statements

### Statement of Net Position September 30, 2018 (with comparative totals at September 30, 2017)

Assets	2018	2017
<b>Current assets</b>		
<b>Unrestricted current assets</b>		
Cash	\$ 12,349,722	\$ 18,557,879
Investments	15,000,000	20,000,000
Receivables:		
Accounts - customers	6,077,302	6,388,522
Accounts - other	709,901	812,900
Interest	182,093	55,585
Current portion of assessments	340,988	341,919
Materials and supplies	2,615,428	2,308,007
Prepaid expenses	631,783	977,462
<b>Total unrestricted current assets</b>	<b>37,907,217</b>	<b>49,442,274</b>
<b>Restricted current assets</b>		
Cash	11,983,697	9,125,803
<b>Total restricted current assets</b>	<b>11,983,697</b>	<b>9,125,803</b>
<b>Total current assets</b>	<b>49,890,914</b>	<b>58,568,077</b>
<b>Restricted noncurrent cash - customer deposits</b>	<b>2,904,198</b>	<b>2,951,063</b>
<b>Capital assets</b>		
Capital assets	518,889,611	502,126,104
Construction in progress	11,845,617	15,772,878
Less accumulated depreciation	(261,848,040)	(250,096,571)
<b>Capital assets, net of accumulated depreciation</b>	<b>268,887,188</b>	<b>267,802,411</b>
Assessments receivable, net of current portion	2,237,527	2,446,745
<b>Total noncurrent assets</b>	<b>274,028,913</b>	<b>273,200,219</b>
<b>Total assets</b>	<b>323,919,827</b>	<b>331,768,296</b>
<b>Deferred outflow of resources</b>		
Accumulated change in fair value of hedging derivatives	7,382,211	10,838,557
Deferred amount on debt refundings	2,399,080	2,534,255
Pensions	9,310,772	8,691,842
Navy wastewater Agreement	14,878,905	15,195,477
Other Post Employment Benefits	386,333	-
	<b>34,357,301</b>	<b>37,260,131</b>

(continued)

The accompanying notes are an integral part of these financial statements.

## Financial Statements (continued)

### Statement of Net Position September 30, 2018 (with comparative totals at September 30, 2017)

Liabilities	2018	2017
<b>Current liabilities</b>		
<b>Current liabilities payable from unrestricted assets</b>		
Accounts payable	\$ 4,711,356	\$ 6,859,147
Accrued wages and benefits	1,596,533	3,022,501
Unearned revenues	423,890	943,213
Other liabilities	598,189	124,179
<b>Total current liabilities payable from unrestricted</b>	<b>7,329,968</b>	<b>10,949,040</b>
<b>Current liabilities payable from restricted assets</b>		
Customer deposits	2,904,198	2,951,063
Interest payable	331,294	332,710
Advances from other governments	6,246,539	4,300,676
Current portion of long-term liabilities	5,763,210	5,611,036
<b>Total current liabilities payable from restricted assets</b>	<b>15,245,241</b>	<b>13,195,485</b>
<b>Total current liabilities</b>	<b>22,575,209</b>	<b>24,144,525</b>
<b>Long-term liabilities</b>		
Bonds payable, net	132,703,366	137,071,540
Derivative instrument - swap	7,382,211	10,838,557
Credit due to US government	27,827,110	28,764,756
Compensated absences	3,029,626	3,052,156
Net OPEB obligation	-	2,675,695
Total OPEB liability	11,087,540	-
Net pension liability	23,155,544	21,708,995
	<b>205,185,397</b>	<b>204,111,699</b>
Less current portion	(5,763,210)	(5,611,036)
<b>Total long-term liabilities</b>	<b>199,422,187</b>	<b>198,500,663</b>
<b>Total liabilities</b>	<b>221,997,396</b>	<b>222,645,188</b>
<b>Deferred inflow of resources</b>		
Pension	2,562,524	1,678,306
Other Post Employment Benefits	618,796	-
	<b>3,181,320.00</b>	<b>1,678,306.00</b>
<b>Net position</b>		
Net investment in capital assets	133,016,908	130,534,404
Restricted:		
Debt service	1,548,161	1,361,230
Capital projects	3,462,463	1,296,050
Other purposes	2,904,198	2,951,063
Unrestricted	(7,833,318)	8,562,186
<b>Total net position</b>	<b>\$ 133,098,412</b>	<b>\$ 144,704,933</b>

The accompanying notes are an integral part of these financial statements.

## Financial Statements (continued)

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

For the fiscal year ended  
September 30, 2018 (with comparative totals for fiscal year ended September 30, 2017)

Revenue	2018	2017
Utility revenue water	\$ 48,659,692	\$ 47,574,035
Utility revenue reclaimed water	124,160	118,515
Utility revenue wastewater	8,840,779	8,198,720
Other operating revenue Navy	3,942,576	3,911,798
Other operating revenue	1,779,256	1,822,824
<b>Total operating revenue</b>	<b>63,346,463</b>	<b>61,625,892</b>
Less abatements	(412,240)	(352,776)
<b>Net operating revenue</b>	<b>62,934,223</b>	<b>61,273,116</b>
<b>Operating expenses</b>		
Source of supply	726,833	753,149
Water treatment	3,861,156	3,902,862
Transmission	6,047,386	5,555,851
Distribution	9,723,689	8,779,765
Wastewater treatment	1,433,986	1,461,818
Wastewater collection	3,918,278	2,212,196
Customer accounts	3,554,099	3,528,204
General and administrative	20,263,922	18,568,514
Depreciation	15,394,595	15,495,344
<b>Total operating expenses</b>	<b>64,923,944</b>	<b>60,257,703</b>
<b>Operating income (loss)</b>	<b>(1,989,721)</b>	<b>1,015,413</b>
<b>Non-operating revenue (expenses)</b>		
Interest income	690,101	447,002
Other income	907,884	605,192
(Loss) on disposal of assets and inventory	(101,568)	(51,630)
Impairment loss	-	(964,868)
Interest expense	(5,876,885)	(5,862,932)
Bond issue costs	(299,841)	(300,631)
Remarketing and letter of credit fees	(316,572)	(340,040)
<b>Total non-operating (expenses)</b>	<b>(4,996,881)</b>	<b>(6,467,907)</b>
<b>Net loss before contributions</b>	<b>(6,986,602)</b>	<b>(5,452,494)</b>
Capital contributions	3,733,908	7,743,049
Change in net position	(3,252,694)	2,290,555
Net position, beginning of year (as previously reported)	144,704,933	142,414,378
Prior period adjustment	(8,353,827)	-
Net position, beginning of year (restated)	136,351,106	-
<b>Net position, end of year</b>	<b>\$ 133,098,412</b>	<b>\$ 144,704,933</b>

The accompanying notes are an integral part of these financial statements.

## Financial Statements (continued)

### Statement of Cash Flows For the fiscal year ended September 30, 2018 (with comparative totals for fiscal year ended September 30, 2017)

	2018	2017
<b>Cash flows from operating activities</b>		
Payments received from customers	\$ 60,381,198	\$ 59,422,383
Deposits received from customers	266,145	282,467
Other cash received	1,484,893	420,539
Payments for salaries and benefits	(28,794,723)	(24,046,531)
Payments to suppliers for goods and services	(22,290,339)	(16,664,158)
Interest paid on and refunds of customer deposits	(339,587)	(437,150)
Net cash provided by operating activities	10,707,587	18,977,550
<b>Cash flows from non-capital financing activities</b>		
Cash received from other governments	5,519,137	16,000,000
Payments for projects of other governments	(3,573,274)	(17,646,278)
Net cash provided (used) by non-capital financing activities	1,945,863	(1,646,278)
<b>Cash flows from capital and related financing activities</b>		
System development fees received (capital contribution)	1,217,346	2,194,021
Proceeds from capital grants (capital contribution)	1,113,191	3,466,923
Assessments	210,149	-
Payments for capital assets	(15,515,687)	(17,858,581)
Proceeds from sale of capital assets	338,118	3,755
Proceeds from issuance of bonds	-	10,000,000
Debt issue costs and financing fees paid	(299,841)	(324,098)
Principal payments of bonds	(4,345,000)	(4,795,000)
Interest payments for bonds	(4,332,447)	(4,496,091)
Net cash (used) by capital and related financing activities	(21,614,171)	(11,809,071)
<b>Cash flows from investing activities</b>		
Interest received	563,593	517,906
Purchases of temporary investments	(15,000,000)	(20,000,000)
Proceeds from temporary investments	20,000,000	10,638,595
Net cash provided (used) by investing activities	5,563,593	(8,843,499)
Net cash inflow (outflow) from all activities	(3,397,128)	(3,321,298)
Cash at beginning of year	30,634,745	33,956,043
Cash at end of year	\$ 27,237,617	\$ 30,634,745

The accompanying notes are an integral part of these financial statements.

## Financial Statements (continued)

### Statement of Cash Flows For the fiscal year ended September 30, 2018 (with comparative totals for fiscal year ended September 30, 2017)

#### Reconciliation of operating income (loss) to net cash provided by operating activities

	2018	2017
Operating income (loss)	\$ (1,989,721)	\$ 1,015,413
Credits to US Navy	(2,344,922)	(2,344,922)
Depreciation	15,394,595	15,495,344
Other income	907,884	605,190
Interest on customer deposits	(26,577)	(19,514)
(Increase) decrease in		
Accounts receivable	414,219	(34,626)
Materials and supplies	(307,421)	(148,477)
Prepaid expenses	345,679	(407,020)
Deferred outflows of resources	(719,433)	(586,701)
Increase (decrease) in		
Accounts payable	(2,147,791)	1,246,585
Unearned revenues	(519,323)	585,057
Accrued wages and benefits (includes net pension liability)	(229,761)	2,641,879
Other liabilities	474,010	(240,893)
Customer deposits	(46,865)	(135,169)
Deferred inflows of resources	1,503,014	1,305,404
<b>Net cash provided by operating activities</b>	<b>\$ 10,707,587</b>	<b>\$ 18,977,550</b>
<b>Schedule of cash</b>		
Unrestricted cash	\$ 12,349,722	\$ 18,557,879
Restricted cash	14,887,895	12,076,866
	<b>\$ 27,237,617</b>	<b>\$ 30,634,745</b>
<b>Schedule of noncash investing, capital and financing activities:</b>		
Change in value of derivative instruments	\$ (3,456,346)	\$ (4,547,553)
Amortization of deferred amount on debt refunding	(135,175)	(9,823)
Capital assets contributed	1,403,371	1,161,781
	<b>\$ (2,188,150)</b>	<b>\$ (3,395,595)</b>

The accompanying notes are an integral part of these financial statements.

## Notes to Financial Statements

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For the fiscal year ended September 30, 2018

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## Notes to Financial Statements (continued)

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For the fiscal year ended September 30, 2018

### Note 1. Summary of Significant Accounting Policies

The Florida Keys Aqueduct Authority's (the Authority) financial statements comply with generally accepted accounting principles in the United States of America (GAAP) and apply all relevant Governmental Accounting Standards Board (GASB) pronouncements.

#### Financial Reporting Entity

The Authority complies with GASB Statements defining the financial reporting entity. This statement establishes standards for defining and reporting on the financial reporting entity. It defines component units as legally separate organizations for which the officials of the primary government are financially accountable and there is a benefit or burden relationship and other organizations for which the nature and significance of their relationship with a primary government are such that exclusion would cause the reporting entity's financial statements to be misleading or incomplete.

The Authority considered all potential component units in determining what organizations should be included in the financial statements. Based on these criteria, there are no component units to include in the Authority's financial statements.

#### Basis of Presentation

The Authority's fund is an enterprise fund. Enterprise funds are proprietary funds used to account for business-type activities provided to the general public. These activities are financed primarily by user fees and the measurement of financial activity focuses on net income measurement similar to the private sector. Activities reported in this fund are those costs necessary to provide water and wastewater service and the related user fees levied to pay for these costs.

#### Measurement Focus and Basis of Accounting

Measurement focus is a term used to describe which transactions are recorded within the various financial statements. Basis of accounting refers to when transactions are recorded regardless of the measurement focus applied. Proprietary funds utilize a measurement focus linked to economic resources. The accounting objectives of this measurement focus are the determination of operating income, changes in net position, financial position, and cash flows. All assets, deferred outflows of resources, liabilities and deferred inflows of resources associated with their activities are reported. Proprietary fund equity is classified as net position. Proprietary funds utilize the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability is incurred.

Proprietary funds distinguish operating revenue and expenses from non-operating items. Operating revenue and expenses generally result from providing services in connection with the proprietary fund's principal ongoing operations. The principal operating revenue of the Authority's enterprise fund is monthly user fees charged to customers for service. The Authority also recognizes as operating revenue fees intended to recover the cost of connecting new customers to the system and other services that relate to the supply of water and the collection and treatment of wastewater. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenue and expenses not meeting this definition are reported as non-operating revenue and expenses.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Summary of Significant Account Policies

In fiscal year 2018, the Authority implemented the following GASB Statements:

Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions*. The objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. This Statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended. Additional information concerning the implementation of GASB No. 75 can be found on page 70.

Statement No. 85, *Omnibus 2017*. The objective of this Statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). The adoption of GASB No. 85 did not have a significant impact on the Authority's financial statements.

### Assets, Deferred Outflows of Resources, Liabilities, Deferred Inflows of Resources and Net Position

#### Materials and Supplies

Materials and supplies are stated at cost or average cost.

#### Capital Assets

Capital assets are recorded at cost for items purchased or constructed and at acquisition value on the date donated for contributed items. The capitalization threshold for tangible and intangible capital assets is \$5,000. Depreciation is computed by the straight-line method based on the estimated useful lives of the asset. It is the Authority's policy to depreciate mass assets half of the year in the year of acquisition and half of the year in the year of retirement. Mass assets are those assets with a large number of homogeneous retirement units such as water meters, distribution systems and collection systems. It is the Authority's policy to depreciate all specifically identified assets based on the month of acquisition or retirement. The Authority evaluates and records impairment losses on long lived assets when events and circumstances indicate that an asset may be impaired. The estimated useful lives of the principal classes of assets are as follows:

Classification	Years
Buildings, structures and improvements	5-40
Equipment, vehicles, furniture and fixtures	3-20
Transmission system	25-50
Distribution systems	25-50
Water meters	10
Water storage facilities	10-50
Pumping stations	5-25
Water treatment equipment	5-30
Reverse osmosis equipment	5-25
Computer equipment	3-5
Wastewater treatment equipment	5-50
Collection systems	25-50

## Notes to Financial Statements (continued)

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For the fiscal year ended September 30, 2018

### Construction Work in Progress

Construction work in progress represents costs for the construction or replacement of the Authority's infrastructure and other capital projects that were not completed at year end.

### Compensated Absences

It is the Authority's policy to permit employees to accumulate earned, unused vacation and sick leave. Employees may, depending on hire date, level and length of service, be paid for various amounts of their total accrued leave upon termination or retirement. The Authority accrues a liability for leave hours that meet the criteria for payment at the eligible employees' current rates of pay plus retirement contributions and employment taxes.

### Long-term Liabilities

Long-term debt and other long-term obligations are reported as liabilities in the Authority's statement of net position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. Bond issue costs are expensed as incurred.

### Interest on Indebtedness

Interest is charged to expense, as incurred, except for interest related to borrowings used for construction projects which is capitalized, net of interest earned on construction funds borrowed. There was no interest capitalized for the fiscal year ended September 30, 2018.

### Equity Classifications

Equity is classified as net position and displayed in three components:

- a. Net investment in capital assets - Consists of capital assets including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, notes, or other borrowings and net of deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction or improvement of those assets.
- b. Restricted – Assets with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws or regulations of other governments; or (2) law through constitutional provisions or enabling legislation, net of related liabilities.
- c. Unrestricted – Residual amounts that do not meet the definition of the two categories above.

### Net Position Flow Assumption

Sometimes the Authority will fund outlays for a particular purpose from both restricted and unrestricted resources. In order to calculate the amounts of net position to report as restricted and unrestricted in the financial statements, a flow assumption must be made about the order in which the resources are considered to be applied. It is the Authority's policy to consider restricted net position to have been depleted before unrestricted net position is applied.

### Deferred Outflows of Resources

The difference between the re-acquisition activities (new debt) and the net carrying value of the old debt on refunded debt transactions is recorded as a deferred outflow of resources and recognized as a component of interest

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

expense using the bonds outstanding method over the shorter of the remaining life of the old debt or the life of the new debt. The derivative is derived from the change in fair value of the derivative instrument from last year to the current year. The acquisition of the Navy Wastewater system will be amortized over the remaining life of the current debt.

### Deferred Inflows of Resources and Deferred Outflows of Resources Related to Pensions and OPEB

Deferred inflows of resources and deferred outflows of resources related to pensions and OPEB that are derived from the difference between projected and actual earnings on the respective pension plan investments are amortized to pension expense over a closed five-year period. Deferred inflows of resources and deferred outflows of resources related to pensions and OPEB that are derived from differences between expected and actual experience with regard to economic or demographic factors ( difference between expected and actual experience) in the measurement of the respective total pension liability and total OPEB liability are amortized to pension expense over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions and OPEB benefits through the respective plan (active and inactive employees) determined as of the beginning of the measurement period. Contributions to the pension plan and OPEB from the employer subsequent to the measurement date of the total liability and before the end of the Authority's reporting period are reported as deferred outflow of resources related to pensions or OPEB. These contributions will be included as a reduction of the net pension liability in the subsequent fiscal year.

### Budget

In accordance with the Authority's enabling legislation, the Board holds public hearings and subsequently adopts an annual budget for revenue, operating expenses and capital expenditures. The budget is adopted on a basis consistent with generally accepted accounting principles except no amounts are provided for depreciation and amortization. It is monitored at various levels of detail within the enterprise fund. Expenses at the fund level may not legally exceed the total budget.

### Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, deferred inflows/outflows and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

### Revenue and Expenses

Operating revenue and expenses for proprietary funds are those that result from providing services and producing and delivering goods or services. It also includes all revenue and expenses not related to capital and related financing, non-capital financing, or investing activities.

### Revenue Recognition

All water and wastewater revenues are recognized and a receivable recorded when the related services are provided. Unbilled revenue and receivables are determined based on the estimated consumption prior to September 30<sup>th</sup> that has not been billed.

### Grants from Government Agencies

The Authority records grants when all applicable eligibility requirements have been met. This normally occurs as amounts are expended and become reimbursable from the granting agency.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Special Assessments

The Authority provides the option for customers in new wastewater districts to pay system development charges levied for the initial construction of these systems over a twenty-year period through a non-ad valorem assessment. This assessment bears interest equal to the Authority's borrowing rate for that particular district and is added to the customers' annual tax bill.

### Comparative Data

The financial statements include certain summarized comparative financial information in total but not by specific level of detail. Such information does not include sufficient detail to constitute a presentation in conformity with accounting principles generally accepted in the United States of America. Accordingly, such information should be read in conjunction with the Authority's financial statements for the fiscal year ended September 30, 2017 from which the summarized was derived.

### Note 2. Cash and Investments

The Authority had cash balances of \$27,237,617 and certificates of deposit (presented as investments) balance of \$15,000,000 at September 30, 2018.

### Custodial Credit Risk

Custodial credit risk is the risk that, in the event of a bank failure, the Authority's deposits may not be returned to it. The Authority does not have a deposit policy for custodial risk. At September 30, 2018 all the Authority's bank deposits, having a bank balance of \$27,320,375 were held by financial institutions designated as Qualified Public Depositories by the Treasurer of the State of Florida. As such, these deposits were covered first by federal depository insurance and the balance covered by the State of Florida's Security for Public Deposits Act. All Qualified Public Depositories, as established by the Act, must place with the State Treasurer eligible collateral equal to or in excess of the required collateral determined by the provisions of the Act. In the event of default by a qualified public depository, the State Treasurer will pay public deposits all losses. Losses in excess of insurance and collateral will be paid through assessments among all Qualified Public Depositories.

### Note 3. Restricted Assets

Restricted assets as of September 30, 2018 consisted of the following:

	<b>2018</b>
<b>Restricted current assets</b>	
<b>Cash</b>	
Debt service	\$ 1,879,455
Advances from other governments	6,641,779
Grant funds	1,296,050
Bond proceeds held for future projects	2,166,413
	<b>11,983,697</b>
<b>Restricted noncurrent - customer deposits</b>	<b>2,904,198</b>
<b>Total restricted assets</b>	<b>\$ 14,887,895</b>

## Notes to Financial Statements (continued)

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For the fiscal year ended September 30, 2018

### Bond and Interest Repayment Assets

According to its master bond resolutions, the Authority is required to transfer to a debt service account, on or before the last day of each month, the following amounts:

- Interest – an amount equal to the interest on all outstanding bonds accrued and unpaid and to accrue to the end of the then current calendar month.
- Principal – an amount equal to (a) the principal amount of all outstanding bonds other than term bonds due and unpaid, (b) that portion of the principal amount of the bonds next due which would have accrued on such bonds other than term bonds next due during the then current calendar month if such principal amount thereof were deemed to accrue monthly in equal installments from a date one year preceding the due date of such bonds next due and (c) the portion of the principal amount of the bonds next due which shall have accrued on such basis in prior months.
- Bond amortization – an amount equal to (a) the principal amount of all outstanding term bonds due and unpaid, (b) that portion of the amortization installment which would have accrued during the then current calendar month if such amortization installment were deemed to accrue monthly in equal amounts from a date one year preceding such due date and (c) the portion of such amortization installment which shall have accrued on such basis in prior months.

The Authority's balances in the debt service account included in Restricted Assets were \$1,879,455 at September 30, 2018.

### Customer Deposits

The Authority retains customer deposits to ensure payment from new customers and customers with a history of delinquent payments. These deposits totaled \$2,904,198 September 30, 2018.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Note 4. Capital Assets

Capital asset activity for the fiscal year ended September 30, 2018 is as follows:

	Balance 9/30/2017	2018		Balance 9/30/2018
		Additions	Retirements	
<b>Capital assets not being depreciated:</b>				
Land	\$ 8,285,155	\$ -	\$ -	\$ 8,285,155
Construction work in progress	15,772,878	13,342,825	(17,270,086)	11,845,617
Total capital assets not being depreciated	24,058,033	13,342,825	(17,270,086)	20,130,772
<b>Capital assets being depreciated:</b>				
Buildings, structures & improvements	69,395,669	741,976	(316,806)	69,820,839
Equipment, vehicles, furniture & fixtures	18,692,351	1,900,199	(1,769,991)	18,822,559
Transmission system	105,982,992	4,747,515	-	110,730,507
Distribution system	138,265,552	2,837,142	(684,271)	140,418,423
Water meters	16,130,141	779,748	(56,857)	16,853,032
Water storage facilities	9,917,737	-	(5,929)	9,911,808
Pump station equipment	28,500,279	1,081,706	(82,314)	29,499,671
Water treatment equipment	39,393,737	177,547	(103,311)	39,467,973
Reverse osmosis equipment	38,389,997	-	(12,787)	38,377,210
Computer equipment	5,387,466	152,384	(923,352)	4,616,498
Wastewater treatment equipment	7,768,542	589,352	(100,194)	8,257,700
Collection system	10,894,572	7,838,750	(27,000)	18,706,322
Reclaimed water	5,121,914	-	-	5,121,914
Total assets being depreciated	493,840,949	20,846,319	(4,082,812)	510,604,456
<b>Less accumulated depreciation:</b>				
Buildings, structures & improvements	(31,754,782)	(2,002,171)	307,495	(33,449,458)
Equipment, vehicles, furniture & fixtures	(11,843,673)	(1,442,283)	1,495,760	(11,790,196)
Transmission system	(74,225,756)	(2,230,989)	-	(76,456,745)
Distribution system	(42,692,951)	(2,919,931)	532,515	(45,080,367)
Water meters	(11,567,990)	(1,032,445)	56,857	(12,543,578)
Water storage facilities	(4,943,520)	(167,658)	1,541	(5,109,637)
Pump station equipment	(16,191,096)	(1,126,818)	82,314	(17,235,600)
Water treatment equipment	(23,064,629)	(1,045,055)	103,311	(24,006,373)
Reverse osmosis equipment	(22,229,558)	(2,157,478)	12,787	(24,374,249)
Computer equipment	(4,561,267)	(329,686)	923,352	(3,967,601)
Wastewater treatment equipment	(3,027,861)	(395,920)	-	(3,423,781)
Collection system	(3,291,202)	(431,016)	100,194	(3,622,024)
Reclaimed water	(702,286)	(113,145)	27,000	(788,431)
Total accumulated depreciation	(250,096,571)	(15,394,595)	3,643,126	(261,848,040)
Total capital assets being depreciated, net	243,744,378	5,451,724	(439,686)	248,756,416
<b>Total net capital assets</b>	<b>\$ 267,802,411</b>	<b>\$ 18,794,549</b>	<b>\$ (17,709,772)</b>	<b>\$ 268,887,188</b>

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### 5. Long-term Liabilities

Long-term liabilities activity for the fiscal year ended September 30, 2018 as follows:

	Beginning balance	2018		Ending balance	Due within one year
		Additions	Deductions		
Water revenue refunding bonds Series 2008	\$ 52,625,000	-	\$ -	\$ 52,625,000	\$ -
Wastewater revenue bonds Series 2012	3,910,000	-	(355,000)	3,555,000	355,000
Water revenue bonds Series 2013A	10,330,000	-	(2,510,000)	7,820,000	2,565,000
Water revenue bonds Series 2013B	6,595,000	-	(315,000)	6,280,000	325,000
Water revenue bonds Series 2014A	2,305,000	-	(110,000)	2,195,000	115,000
Water revenue bonds Series 2015A	34,560,000	-	-	34,560,000	-
Water revenue bonds Series 2015B	16,435,000	-	(835,000)	15,600,000	855,000
Wastewater revenue bonds Series 2016	9,850,000	-	(220,000)	9,630,000	235,000
Subtotal	136,610,000	-	(4,345,000)	132,265,000	4,450,000
Add unamortized Series 2015A bond premium	461,540		(23,174)	438,366	23,174
Total bonds payable	137,071,540	-	(4,368,174)	132,703,366	4,473,174
Derivative instrument - swap	10,838,557	-	(3,456,346)	7,382,211	-
Credit due to US Government-water	11,124,649	-	(847,523)	10,277,126	890,086
Credit due to US Government-wastewater	17,640,107	-	(90,123)	17,549,984	94,734
Compensated absences	3,052,156	3,029,626	(3,052,156)	3,029,626	305,216
<b>Total long-term liabilities</b>	<b>\$ 179,727,009</b>	<b>\$ 3,029,626</b>	<b>\$ (11,814,322)</b>	<b>\$ 170,942,313</b>	<b>\$ 5,763,210</b>

#### Water Revenue and Water Revenue Refunding Bonds

In June 2008, the Authority issued \$52,625,000 of Series 2008 water revenue refunding bonds. The bonds bear interest at a variable rate that is set each week as the bonds are remarketed (1.56% at September 30, 2018). The proceeds from these bonds were used to refund Series 2006 bonds, which were insured by a failed bond insurer. The refunding was necessary in order to replace the bond insurer with a letter of credit. Principal payments will be due annually on September 1 beginning in 2022 through 2037. The interest rate swap that was entered into when the Series 2006 bonds were issued remains in place with the notional amount now tied to the Series 2008 bonds.

## Notes to Financial Statements (continued)

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For the fiscal year ended September 30, 2018

### Note 5. Long-term Liabilities (continued)

In July 2013, the Authority privately placed \$19,990,000 Series 2013A water revenue refunding bonds with a bank at an interest rate of 1.64%. The proceeds from this issue were used to refund Series 2003 water revenue refunding bonds. Interest is payable on March 1 and September 1 and principal is payable annually on September 1 through 2021. The refunding resulted in a difference between the reacquisition price and the net carrying amount of the old debt of \$78,602. This difference is reported in the accompanying financial statements as a deferred outflow of resources.

In November 2013 and in January 2014 the Authority privately placed with a bank \$7,700,000 Series 2013B water revenue bonds and \$2,670,000 Series 2014A water revenue bonds respectively, both series at an interest rate of 3.52%. The proceeds from these bonds were used to fund ongoing capital improvements to the water system. Interest on both series is due March 1 and September 1 and principal is paid annually on September 1 through 2033.

In April 2015, the Authority issued \$34,560,000 Series 2015A water revenue refunding bonds with an interest rate range of 3.37%-5.00% and privately placed \$16,435,000 Series 2015B water revenue bonds at an interest rate of 2.52% with a bank to advance refund a portion of the outstanding Series 2007 water revenue bonds (see above). Interest on both series is due March 1 and September 1. Principal on the Series 2015A bonds will be paid on September 1, 2020-2024 and September 1, 2031-2037 for the Series 2015A bonds and September 1, 2018-2022 and September 1, 2025-2030 for the Series 2015B bonds.

The water revenue and water revenue refunding bonds were issued under the Authority's Resolution No. 03-12 adopted May 6, 2003 and Amended and Restated Resolution 08-15 adopted June 9, 2008. The payment of the principal and interest on these bonds is collateralized by a pledge of and lien upon the net revenues derived from the operation of the Authority's water utility and other monies including investments held in certain accounts established by the bond resolution. Under the bond resolution, the Authority will fix, establish, maintain and collect the water rates and revise the same from time to time, whenever necessary, that will always provide in each fiscal year, (a) net revenues adequate at all times to pay in each fiscal year at least one hundred ten percent (110%) of the annual debt service requirement becoming due in such fiscal year on each series of outstanding bonds and at least one hundred percent (100%) of any amounts required by the terms of the bond resolution to be deposited in the reserve account or reserve account insurance policy in such fiscal year, and (b) net revenues, together with impact fees collected, adequate to pay at least one hundred twenty percent (120%) of the current annual debt service requirement becoming due in such fiscal year on the outstanding bonds. The rates will not be reduced to a level that would be insufficient to provide net revenues fully adequate for the purposes provided by the bond resolution.

For the current year, debt service requirements and total pledged revenue to meet the 110% test were \$8,672,312 and \$13,830,373, respectively.

### Wastewater Revenue Bonds

In September 2012, the Authority privately placed \$5,635,000 Series 2012 wastewater revenue refunding bonds with a bank at an interest rate of 2.86%. The proceeds from this issue were used to refund Series 2001, Series 2004 and Series 2009 wastewater revenue bonds. Interest is payable on March 1 and September 1 and principal is paid annually on September 1 through 2030.

## Notes to Financial Statements (continued)

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For the fiscal year ended September 30, 2018

In November 2016, the Authority privately placed \$10,000,000 series 2016 wastewater revenue bonds with a bank at an interest rate of 1.72%. The proceeds from this issue were used to fund ongoing capital improvements to the wastewater system. Interest is payable on March 1 and September 1 and principal is paid annually on September 1 through 2036.

Wastewater revenue and wastewater revenue refunding bonds were issued under the Authority's Resolution No. 00-20 adopted October 18, 2000 and Resolution No. 01-25 adopted September 19, 2001. The payment of the principal and interest on these bonds is collateralized by a pledge of and lien upon the net revenues derived from the operation of the Authority's wastewater utility and other monies including investments held in certain accounts established by the bond resolution. Under the bond resolution, the Authority will fix, establish, maintain and collect the wastewater rates and revise the same from time to time, whenever necessary, that will always provide in each fiscal year, (a) net revenues adequate at all times to pay in each fiscal year at least one hundred ten percent (110%) of the annual debt service requirement becoming due in such fiscal year on each series of outstanding bonds or (b) net revenues, together with impact fees collected, adequate to pay at least one hundred twenty percent (120%) of the current annual debt service requirement becoming due in such fiscal year on the outstanding bonds. The rates will not be reduced to a level that would be insufficient to provide net revenues fully adequate for the purposes provided by the bond resolution.

For the current year, debt service requirements and total pledged revenue to meet the 110% test were \$856,335 and \$2,240,343, respectively.

### Interest Rate Swaps

At September 30, 2018, the Authority was a party to a synthetic fixed rate swap agreement. The following are disclosures of pertinent aspects of this agreement. The synthetic fixed rate swap was determined to be an effective hedge and therefore follows hedge accounting where the transaction is strictly a statement of net position transaction. Since the fair value was in a negative position, the swap is recorded as a derivative liability with a corresponding deferred outflow of resources which represent the accumulated change in fair value of the swap.

### Objective

In connection with the Florida Keys Aqueduct Authority Series 2006 water revenue and revenue refunding bonds, issued in April 2006 as variable rate securities bearing interest at a weekly interest rate, the Authority simultaneously executed a floating-to-fixed interest rate swap (swap) to lock in a synthetic fixed cost of borrowing. The swap structure was used as a means to lower the Authority's borrowing cost when compared to a traditional fixed-rate bond issue and as a hedge against variable interest rate exposure. The Series 2006 bonds were initially issued at a weekly interest rate. These bonds were refunded by Series 2008 bonds in June 2008. The swap is now tied to these bonds, which were also issued and are currently at a weekly interest rate. However, at the direction of the Authority and in compliance with bond documentation, they could be converted to other modes of payment (daily, long term or auction rate).

### Terms

The Authority executed the swap with Citigroup Financial Products, Inc. (Citi) in April 2006 with an expiration date of September 1, 2035. In April 2012, Citi was replaced as counterparty by the Bank of New York Mellon (counterparty). This transaction did not terminate the hedge accounting for this swap as a result in the change of the counterparty. The swap has a notional amount of \$49,700,000 corresponding to the related Series 2008

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

bonds. Under the swap, the Authority pays a fixed rate of 3.832% and receives a variable rate computed as 64.46% of the 3-month LIBOR plus 20 basis points (see rates below). Additionally, the Authority pays annual transactional fees of .72% for remarketing services and letter of credit fees, bringing the total fixed rate paid by the Authority to 4.55%. The total synthetic interest rate can vary, however, due to a potential for mismatch between the floating rate paid by the Authority on the Series 2008 bonds (based on a weekly tax-exempt market rate equivalent to the Securities Industry and Financial Markets (SIFMA), and the floating rate received by the Authority from the Counterparty on the swap, (based on a percentage of a taxable 3-month LIBOR rate). This potential for mismatch between the rate on the Series 2008 bonds and the swap is referred to as basis risk.

As of September 30, 2018 the rates for the variable rate bonds and swap were as follows:

	Terms	Rates
		2018
<b>Interest Rate Swap:</b>		
Fixed payment to counterparty	Fixed	3.8320%
Variable payment from counterparty	LIBOR	1.7460%
Net interest rate swap payments		2.0860%
Series 2008 Variable Rate Bond Payments	Weekly Variable Rate	1.5600%
Remarketing liquidity and letter of credit fees		0.4500%
<b>Synthetic interest rate on bonds</b>		<b>4.0960%</b>

### Fair Value

As of September 30, 2018, the swap had a negative fair value of \$7,382,211 indicating the amount that the Authority would have had to pay the counterparty to terminate the swap agreement. However, as of that date no event of termination had occurred. Since the coupons on the Authority's variable rate bonds adjust to changing interest rates, the bonds do not have a corresponding fair value increase. The fair value was estimated using the zero coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rates implied by the yield curve correctly anticipate future spot interest rates. These payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement of the swap.

### General

The derivative contract between the Authority and the counterparty is based on the International Swap Dealers Association Master Agreement, which includes standard termination events, such as failure to pay and bankruptcy. The Authority or the counterparty may terminate the swap if the other party fails to perform under the terms of the contract. A termination of the swap may result in the Authority making or receiving a termination payment.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Swap payments and associated debt

As of September 30, 2018, net swap payments, assuming current interest rates remain the same, for their term were as follows. As short-term rates fluctuate, the 2008 bonds' interest payments and net swap payment will vary.

Fiscal Year Ending September 30	Principal	Interest	Interest Rate Swap, Net	Total
2019-2023	\$ 5,650,000	\$ 5,233,638	\$ 5,127,711	\$ 16,011,349
2024-2028	16,595,000	4,081,908	3,968,936	24,645,844
2029-2033	20,720,000	2,256,828	2,170,175	25,147,003
2034-2035	9,660,000	293,360	279,629	10,232,989
	<u>\$ 52,625,000</u>	<u>\$ 11,865,734</u>	<u>\$ 11,546,451</u>	<u>\$ 76,037,185</u>

### Credit risk

As of September 30, 2018, the Authority is not exposed to credit risk because the swap had a negative fair value. However, should interest rates change and the fair market value of the swap become positive, the Authority would be subject to credit risk in the amount of the swap's fair value. As of September 30, 2018, the counterparty was rated A1 and A by Moody's Investors Service and Standard & Poor's respectively.

### Termination risk

If the counterparty to the swap defaults, or if the swap is terminated, the Authority will be exposed to the variable remarketing rate on the 2008 bonds. If the swap is terminated, the 2008 bonds would no longer carry a synthetic fixed rate. Also, if at the time of termination, the swap has a negative fair value, the Authority would be liable to the counterparty for a payment equal to the swap's fair market value.

### Basis risk

The swap exposes the Authority to basis risk should the relationship between LIBOR and the remarketing rate on the 2008 bonds converge, changing the overall synthetic fixed rate on the Series 2008 bonds. The effect of this difference in basis is indicated by the difference between the intended synthetic fixed rate (4.552%) and the overall synthetic fixed rate as of September 30, 2018 (4.0960%). If a change occurs in the relationship between taxable and tax-exempt interest rates, the Authority's overall cost of borrowing will be impacted.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

The future principal maturity amounts and related interest costs for all long-term debt are as follows:

Fiscal year ending September 30	Bonds			Credit due to US Government		
	Principal	Interest	Total	Principal	Interest	Total
2019	\$ 4,450,000	\$ 4,424,230	\$ 8,874,230	\$ 984,820	\$ 1,360,101	\$ 2,344,921
2020	4,555,000	4,325,490	8,880,490	1,034,367	1,310,554	2,344,921
2021	4,595,000	4,229,117	8,824,117	1,086,408	1,258,514	2,344,922
2022	5,665,000	4,165,697	9,830,697	1,141,065	1,203,856	2,344,921
2023	5,945,000	3,902,633	9,847,633	1,198,474	1,146,448	2,344,922
2024-2028	33,530,000	16,162,658	49,692,658	6,030,031	4,778,017	10,808,048
2029-2033	40,235,000	10,176,140	50,411,140	864,159	3,986,252	4,850,411
2034-2038	33,290,000	2,983,916	36,273,916	1,109,026	3,741,385	4,850,411
2039-2043				1,423,278	3,427,133	4,850,411
2044-2048				1,826,576	3,023,835	4,850,411
2049-2053				2,344,153	2,506,258	4,850,411
2054-2058				3,008,389	1,842,022	4,850,411
2059-2063				3,860,842	989,569	4,850,411
2064-2068				1,915,522	105,482	2,021,004
<b>Totals</b>	<b>\$ 132,265,000</b>	<b>\$ 50,369,881</b>	<b>\$ 182,634,881</b>	<b>\$ 27,827,110</b>	<b>\$ 30,679,426</b>	<b>\$ 58,506,536</b>

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## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Note 6. Rates for Service

#### Water

The Authority's water rate structure is an inverted block structure, with rates for consumption increasing with usage. In addition to consumption charges, customers are charged a monthly base facility charge, based on meter size, to recover a portion of fixed costs of providing service. If senior citizens and totally and permanently disabled veterans fall within certain income limitations, their base facility charge is waived.

The base facility charge for standard 5/8" meter customers at September 30, 2018 was \$14.40. The consumption blocks and related rates in effect at September 30, 2018 were as follows:

	Gallons	2018
Block 1	0-6,000	\$ 6.05
Block 2	6,001-12,000	8.83
Block 3	12,001-30,000	9.90
Block 4	30,001-50,000	11.05
Block 5	>50,000	\$ 12.13

The rates are adjusted each year for inflation using a standard indexing formula. The Authority has contractual agreements with the United States Navy (the Navy) that define water rates charged for water used on Navy properties. The Navy pays the same base facility charges as other customers, but pays a flow charge of \$3.78 per thousand gallons for all water used.

#### Wastewater

The Authority provides wastewater service to certain areas of the Florida Keys. The rate structure is similar to the water rate structure, with each district having a base facility charge and a flow charge. The flow charge is based on water flows. Flows are capped at 10,000 gallons for wastewater billing purposes for single-family dwelling customers. The base facility charge for standard 5/8" meter customers at September 30, 2018 was \$24.66. The flow charged on the first 10,000 gallons was \$9.33 per thousand gallons.

#### Reclaimed water

Rates for reclaimed water are 50% of potable water rates. There is no base facility charge for reclaimed water.

### Note 7. Other Operating Revenue

Other operating revenue consisted of the following at September 30, 2018:

	2018
Penalty charges	\$ 675,174
Service and installation charges	985,384
Hydrant rental fees	63,650
Front footage fees	55,048
Total other operating revenue	1,779,256
Navy water system operations charge	2,443,632
Navy wastewater system operations charge	1,498,944
Total other operating revenue Navy	3,942,576
<b>Total</b>	<b>\$ 5,721,832</b>

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Note 8. Risk Retention

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Authority carries commercial insurance for risks of loss. The Authority retains a certain level of risk relating to employee health insurance. A cash reserve account of \$1,464,855 is set aside to pay employee health claims. The Authority has an insurance policy that covers individual claims in excess of \$130,000. Based on the duration period of claims, management determined that any claims incurred but not reported (IBNR) are insignificant. There were no significant reductions in insurance coverage in the current year from coverage to the prior year. Flood insurance coverage is limited to \$500,000 per covered location due to statutory limitations. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past four fiscal years. There were eighteen open claims at September 30, 2018 covered by insurance. In addition, a contingency reserve has been established to cover uninsured losses.

As of September 30, 2018 and 2017 the total liabilities on pending claims that are included in current liabilities in other liabilities on the statement of net position were as follows:

	2018	2017
Claims payable, beginning of year	\$ 149,573	\$ 146,189
Incurred claims	2,944,729	2,961,954
Payments on claims	(2,935,570)	(2,958,570)
Claims payable, end of year	\$ 158,732	\$ 149,573

### Note 9. Commitments and Contingencies

#### Construction commitments

The Authority had contractual commitments of \$19,136,189 at September 30, 2018 for design and construction of capital projects and general contractual commitments. Of that amount \$3,906,787 will be reimbursed by Monroe County for the design and construction of county-owned wastewater systems.

#### Hurricane contingency

On September 10, 2017 Hurricane Irma made landfall in the Florida Keys as a Category 4 storm. The hurricane caused significant damage to the Authority's water system and structures. The extent of this damage is still being assessed. The Authority has filed claims with its insurance companies and the Federal Emergency Management Agency (FEMA) to recover any eligible losses.

#### Leases

The Authority is a party to a 99-year lease with Monroe County which provides for the Authority to operate and maintain county-owned wastewater systems, including setting rates sufficient to pay for all operating costs. At September 30, 2018, the Authority was operating two systems under this agreement. Initial consideration of \$10 was paid in November 2005, the effective date of the lease. No further lease payments are due under this agreement. The Authority is currently obligated under non-cancelable operating lease agreements for office space and office equipment. The leases expire through the year ending September 30, 2022.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

The following is a summary of the minimum rental costs for the remaining terms of the leases:

### Fiscal Year Ending September 30

2019	\$	11,445
2020		3,151
2021		1,918
2022		1,439

Rent expense for the fiscal year ended September 30, 2018 was \$49,143.

### Legal Matters

The Authority is involved in various legal disputes which have arisen in the normal course of business and with the construction of the new facilities. It is the opinion of management that the eventual outcome of these matters will not have a material adverse effect on the financial condition of the Authority.

### Potential Legal and Legislative Changes

The Authority has an inter-local agreement with the Monroe County Board of County Commissioners (BOCC) providing funding for the implementation of wastewater initiatives in Monroe County. The Authority has entered into contracts and incurred costs toward implementing various wastewater projects that, should those projects not be funded by Monroe County, may become liabilities of the Authority. In this event the Authority will pursue recovery of those costs from the County. It is the opinion of management that any expense not recovered will not have a material adverse effect on the financial condition of the Authority.

### Water Main Extension Rebates

Customers are entitled to a water main extension rebate for future connections when they are required to extend a pipeline larger than certain specifications. Rebates are payable at the time connections are made.

### Note 10. Retirement Plan

#### General Information

All of the Authority'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 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 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

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

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:

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Annual Arithmetic Return</b>	<b>Compound Annual (Geometric) Return</b>	<b>Standard Deviation</b>
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	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%
<b>Total</b>	<b>100.0%</b>			

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 at P.O. Box 9000, Tallahassee, Florida 32315-9000, or visiting their website below.

[www.dms.myflorida.com/workforce\\_operations/retirement/publications](http://www.dms.myflorida.com/workforce_operations/retirement/publications).

### 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.

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.

For Pension 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 and Senior Management Service members. Also, the final average compensation for all these members will be based on the eight highest years of salary.

## Notes to Financial Statements (continued)

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For the fiscal year ended September 30, 2018

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 3% 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%, Senior Management Service 21.77% and 24.06% 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 Authority's contributions, including employee contributions, to the Pension Plan totaled \$2,042,236 for the fiscal year ended September 30, 2018.

### Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At September 30, 2018, the Authority reported a liability of \$16,079,593 for its proportionate share of the Pension Plan's net pension liability. The net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2018. The Authority's proportionate share of the net pension liability was based on the Authority's 2017-18 fiscal year contributions relative to the 2016-17 fiscal year contributions of all participating members. At June 30, 2018, the Authority's proportionate share was 0.053%, which was an increase of 0.003% from its proportionate share measured as of June 30, 2017.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

For the fiscal year ended September 30, 2018, the Authority recognized pension expense of \$1,451,775. In addition, the Authority 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
Differences between expected and actual experience	\$ 1,362,619	\$ 49,457
Change of assumptions	5,255,711	-
Net difference between projected and actual earnings on Pension Plan investments	-	1,242,742
Changes in proportion and differences between Authority's Pension Plan contributions and proportionate share of contributions	801,092	310,493
Authority's Pension Plan contributions subsequent to the measurement date	326,532	-
<b>Total</b>	<b>\$ 7,745,954</b>	<b>\$ 1,602,692</b>

The deferred outflows of resources related to the Pension Plan, totaling \$326,532 resulting from the Authority's contributions to the Plan subsequent to the measurement date, but before the end of the employer's contributing reporting period, will be recognized as a reduction of the net pension liability in the subsequent fiscal year. 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:

Fiscal Year Ending September 30	Amount
2019	\$ 2,310,762
2020	1,524,730
2021	211,178
2022	958,888
2023	687,774
Thereafter	123,398
	<b>\$ 5,816,730</b>

### Actuarial Assumptions

The total pension liability in the July 1, 2018 actuarial valuation was determined using the following actuarial assumption, 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 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.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Discount Rate

The discount rate used to measure the total pension liability was 7.00%. 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 Authority’s Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following represents the Authority’s proportionate share of the net pension liability calculated using the discount rate of 7.00%, as well as what the Authority’s proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%) or one percentage point higher (8.00%) than the current rate:

	1% Decrease (6.00%)	Current Discount Rate (7.00%)	1% Increase (8.00%)
Authority’s Proportionate share of the net pension liability	\$ 29,355,325	\$ 16,079,593	\$ 5,062,734

### Pension Plan Fiduciary Net Position

Detailed information regarding the FRS Pension Plan’s fiduciary net position is available in the separately issued FRS Pension Plan and Other State-Administered Systems Comprehensive Annual Financial Report.

### Payables to the Pension Plan

At September 30, 2018, the Authority reported a payable in the amount of \$344,841 for outstanding contributions to the Pension Plan required for the fiscal year ended September 30, 2018.

### 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 State-administered retirement system must provide proof of health insurance coverage, which may include Medicare.

#### 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 year ended September 30, 2018, the HIS contribution for the period October 1, 2017 through June 30, 2018 and from July 1, 2018 through September 30, 2018 was 1.66%. The Authority contributed 100% of its statutorily required contributions for the current and preceding three years. HIS Plan contributions are deposited in a separate trust

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

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 Authority's contributions to the HIS Plan totaled \$26,689 for the fiscal year ended September 30, 2018.

### Pension Liabilities, Pension Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

At September 30, 2018, the Authority reported a liability of \$7,075,951 for its proportionate share of the HIS Plan's net pension liability. The net pension liability was measured as of September 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of July 1, 2018. The Authority's proportionate share of the net pension liability was based on the Authority's 2017-18 fiscal year contributions relative to the 2016-17 fiscal year contributions of all participating members. At June 30, 2018, the Authority's proportionate share was 0.066%, which was an increase of 0.004% from its proportionate share measured as of June 30, 2017. For the fiscal year ended September 30, 2018, the Authority recognized pension expense of \$260,065. In addition, the Authority 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
Differences between expected and actual experience	\$ 108,330	\$ 12,022
Change of assumptions	786,933	748,129
Net difference between projected and actual earnings on HIS Plan investments	4,271	-
Change in proportion and differences between Authority's HIS Plan contributions and proportionate share of contributions	588,858	199,681
Authority's HIS Plan contributions subsequent to the measurement date	76,426	-
	<b>\$ 1,564,818</b>	<b>\$ 959,832</b>

The deferred outflows of resources related to the HIS Plan, totaling \$76,426 resulting from Authority's contributions to the HIS Plan subsequent to the measurement date, but before the end of the employer's contributing reporting period, will be recognized as a reduction of the net pension liability in the subsequent fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the HIS Plan will be recognized in pension expense as follows:

Fiscal Year Ending September 30:	Amount
2019	\$ 194,686
2020	194,326
2021	133,834
2022	60,247
2023	(71,633)
Thereafter	17,100
	<b>\$ 528,560</b>

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### 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
Municipal bond rate	3.87 %

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.

### Discount Rate

The discount rate used to measure the total pension liability was 3.87%. 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 year Bond Municipal Bond Index was adopted as the applicable municipal bond index.

### Sensitivity of the Authority's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following represents the Authority's proportionate share of the net pension liability calculated using the discount rate of 3.87%, as well as what the Authority's proportionate share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower (2.87%) or one percentage point higher (4.87%) than the current rate:

	1% Decrease (2.87%)	Current Discount Rate (3.87%)	1% Increase (4.87%)
Authority's proportionate share of the net pension liability	\$ 8,059,092	\$ 7,075,951	\$ 6,256,444

### Pension 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 State-Administered Systems Comprehensive Annual Financial Report.

### Payables to the HIS Plan

At September 30, 2018, the Authority reported a payable in the amount of \$5,821 for outstanding contributions to the HIS Plan required for the fiscal year ended September 30, 2018.

### Summary of Pension Components

	Pension	HIS	Total
Deferred Outflows	\$ 7,745,954	\$ 1,564,818	\$ 9,310,772
Deferred Inflows	(1,602,692)	(959,832)	(2,562,524)
Net pension liability	16,079,593	7,075,951	23,155,544
Pension Expense	\$ 1,451,775	\$ 260,065	\$ 1,711,840

## Notes to Financial Statements (continued)

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For the fiscal year ended September 30, 2018

### 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. Authority 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 as the Pension Plan. Contributions are directed to individual member accounts, and the individual members allocate contributions and account balances among various approved investment choices. Costs of administering the Investment Plan, including the FRS Financial Guidance Program, are funded through an employer contribution of 0.04 percent of payroll and by forfeited benefits of plan members. 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%.

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. Non-vested 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 Authority. 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 Authority's Investment Plan contribution (pension expense) totaled \$261,552 for the fiscal year ended September 30, 2018.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Note 11. Other Post-Employment Benefits (OPEB)

#### Plan Description

The Authority provides an optional single employer defined benefit post-employment healthcare plan to eligible individuals. The plan allows its employees and their beneficiaries to continue to obtain health insurance benefits upon retirement. Certain employees in a closed benefits class are provided continuation of coverage fully paid by the Authority or receive a supplement from the Authority. Employees in the open benefits class may continue coverage at their own cost. The benefits of the plan conform to Florida Statutes, which are the legal authority for the plan. The plan has no assets and does not issue a separate financial report.

#### Members Covered

Members covered as of October 1, 2016, the date of actuarial valuation, the following employees were covered by the benefit terms:

#### Membership

Inactive employees or beneficiaries currently receiving benefit payments	20
Inactive employees entitled to but not yet receiving benefit payments	-
Active employees	265
Total	<u>285</u>

#### Funding Policy and Annual OPEB Cost

Retirees and their beneficiaries pay the same group rates as are charged to the Authority for active employees by its healthcare provider. However, the Authority's actuaries, in their actuarial valuation, calculate an offset to the cost of these benefits as an employer contribution, based upon an implicit rate subsidy. This offset equals the total age-adjusted costs paid by the Authority for its active employees for coverage of the retirees and their dependents for the year net of the retiree's own payments for the year.

The annual OPEB cost is calculated based on the annual required contribution of the employer, an amount actuarially determined in accordance with GASB Statement No. 75. The annual required contribution represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and to amortize any unfunded actuarial liabilities over a period not to exceed thirty years. The required contribution rate for the employer is based on actual costs (pay as you go). The plan members are not required to contribute.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

The annual OPEB cost for the Authority for 2018 and the related information is as follows:

### Schedule of Changes in Total OPEB Liability and Related Ratios

	<u>2018</u>
Service Cost	\$ 272,991
Interest	356,207
Benefit Changes	-
Experience	110,758
Assumption Changes	(681,938)
Benefit Payments	<u>(373,202)</u>
Net Change in Total OPEB Liability	(315,184)
Total OPEB Liability - beginning	<u>11,402,724</u>
Total OPEB Liability - ending	<u>\$ 11,087,540</u>

### OPEB Liabilities, OPEB Expense, Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

At September 30, 2018, the Authority reported a liability of \$11,087,540 for its total OPEB liability. The liability was measured as of October 1, 2017 and the OPEB liability was determined by an actuarial valuation as of October 1, 2016.

For the fiscal year ended September 30, 2018 the Authority recognized an OPEB expense of \$290,481. In addition, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

Description	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 100,503	\$ -
Change of assumptions		\$ 618,796
Contributions subsequent to measurement date	<u>285,830</u>	<u>-</u>
<b>Total</b>	<u>\$ 386,333</u>	<u>\$ 618,796</u>

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

Contributions subsequent to the measurement date (deferred outflow of resources) are to be recognized as a reduction the total OPEB liability in the subsequent fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the OPEB plan will be recognized in OPEB expense as follows:

Fiscal Year Ending September 30	Amount
2019	\$ 52,887
2020	52,887
2021	52,887
2022	52,887
2023	52,887
Thereafter	253,858
	<b>\$ 518,293</b>

### Discount Rate

The discount rate used to measure the total OPEB liability was 3.50%. In general, the discount rate for calculating the total OPEB liability were based on the Fidelity 20-Year Municipal GO AA Index – daily rate closest or equal to but not later than the respective measurement dates.

### Sensitivity of the Authority's Total OPEB Liability to Changes in the Discount Rate

The following represents the Authority's total OPEB liability calculated using the discount rate of 3.50%, as well as what the Authority's total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.50%) or one percentage point higher (4.50%) than the current rate:

	1% Decrease (2.50%)	Current Discount Rate (3.50%)	1% Increase (4.50%)
Authority's total OPEB liability	\$ 12,797,889	\$ 11,087,540	\$ 9,491,574

Progress presented as required supplementary information is designed to provide multi-year trend information to show whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liability for benefits. However, the Authority has not contributed assets to the plan at this time.

### Sensitivity of the Total OPEB Liability to the Trend Rate Assumption

	1% Decrease	Current Trend Rates	1% Increase
Trend Rates			
- Medical	6.0% to 3.4%	7.0% to 4.4%	8.0% to 5.4%
- Dental	3.50%	4.50%	5.50%
Total OPEB Liability	\$ 9,706,160	\$ 11,087,540	\$ 12,565,419

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Actuarial methods and assumptions

Projections of benefits are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits in force at the valuation date and the pattern of sharing benefit costs between the Authority and the plan members to that point. Actuarial calculations reflect a long-term perspective and employ methods and assumptions that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets. Significant methods and assumptions were as follows:

<b>Actuarial Valuation Date</b>	October 1, 2016
<b>Measurement Date of the Total OPEB Liability</b>	October 1, 2017
<b>Employer's Fiscal Year End (Reporting Date)</b>	September 30, 2018
<b>Inflation</b>	2.60% - not explicitly used in valuation
<b>Projected salary increases</b>	3.70% - 7.80%
<b>Mortality Rates</b>	Healthy members based on various RP-2000 mortality tables with varying Collar adjustments and generational mortality improvements with Scale BB. Disabled employees based on RP-2000 tables setback 4 years for males and set forward 2 years for females and no projected improvements.
<b>Healthcare cost trends</b>	Based on the Getzen Model starting at 7.0% gradually decreasing to an ultimate rate of 4.4% in 2040; 4.5% for dental & vision for all years
<b>Retiree's share of benefit-related costs</b>	0% for Tier I employees hired on or before June 30, 2004. For all others blended premium costs shared with FRS and/or FCAA. FRS provides \$5 per month per year of service with a maximum of \$150 per month at all Tier levels. Tier I employees hired on or after July 1, 2004 receive an additional \$10 per month per year of service through FCAA. Tier II employees receive an additional \$5 per month per year of service through FCAA. Class 1, 2, and 5 employees hired or promoted prior to May 1, 2016 share 0% of life insurance costs.

## Notes to Financial Statements (continued)

For the fiscal year ended September 30, 2018

### Note 12. Prior Period Adjustment

Due to the implementation of GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions*, the Authority restated beginning net position at September 30, 2017. The effect of the implementation of GASB 75 on net position as previously reported as of September 30, 2017 is a decrease in net position of \$8,353,827 and is composed of the following factors:

<b>Total Net Position at September 30, 2017, as previously reported</b>	\$	144,704,933
Prior period adjustments:		
Eliminate net OPEB obligation at September 30, 2017, as previously reported		2,675,695
Recording of total OPEB liability at September 30, 2017, as per GASB 75		(11,402,724)
Recognition of GASB 75 related Deferred Outflows		373,202
		(8,353,827)
<b>Total Net Position at September 30, 2017, restated</b>	\$	136,351,106

### Note 13. Related Party Transactions

For the fiscal year ended September 30, 2018, the Authority entered into transactions with companies owned by one of its Board members. These companies were paid \$4.9 million for construction related costs and contracts in the amount of \$6.1 million were entered into for capital construction projects.

## Required Supplementary Information

For the fiscal year ended September 30, 2018

### Schedule of the Authority's Proportionate Share of Net Pension Liability Florida Retirement System Pension Plan

June 30,	2018	2017	2016	2015	2014
Authority's proportion of the net pension liability	0.053401272%	0.050685961%	0.052225029%	0.054182984%	0.051133999%
Authority's proportionate share of the net pension liability	\$ 16,079,593	\$ 14,992,568	\$ 13,186,861	\$ 6,998,459	\$ 3,119,926
Authority's covered payroll	\$ 21,831,323	\$ 19,955,444	\$ 20,222,049	\$ 19,365,881	\$ 18,580,159
Authority's proportionate share of the net pension liability as a percentage of its covered payroll	73.65%	75.13%	65.21%	36.14%	16.79%
Plan fiduciary net position as a percentage of the total pension liability	84.26%	83.89%	84.88%	92.00%	96.09%

### Schedule of the Authority's Contributions Florida Retirement System Pension Plan

September 30,	2018	2017	2016	2015	2014
Contractually required contribution	\$ 1,521,893	\$ 1,319,480	\$ 1,273,591	\$ 1,321,027	\$ 1,129,253
Contributions in relation to the contractually required contribution	(1,521,893)	(1,319,480)	(1,273,591)	(1,321,027)	(1,129,253)
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Authority's covered payroll	\$ 21,904,322	\$ 19,980,917	\$ 19,521,084	\$ 19,443,078	\$ 18,870,171
Contributions as a percentage of covered payroll	6.95%	6.60%	6.52%	6.79%	5.98%

### Schedule of the Authority's Proportionate Share of Net Pension Liability Florida Retirement System Health Insurance Subsidy

June 30,	2018	2017	2016	2015	2014
Authority's proportion of the net pension liability	0.066854448%	0.062814615%	0.065622570%	0.063837077%	3.823229200%
Authority's proportionate share of the net pension liability	\$ 7,075,951	\$ 6,716,428	\$ 7,648,039	\$ 6,510,378	\$ 3,574,813
Authority's covered payroll	\$ 21,831,323	\$ 19,955,444	\$ 20,222,049	\$ 19,365,881	\$ 18,580,159
Authority's proportionate share of the net pension liability as a percentage of its covered payroll	32.41%	33.66%	37.82%	33.62%	19.24%
Plan fiduciary net position as a percentage of the total pension liability	2.15%	1.64%	0.97%	0.50%	0.99%

### Schedule of the Authority's Contributions Florida Retirement System Health Insurance Subsidy

September 30,	2018	2017	2016	2015	2014
Contractually required contribution	\$ 362,553	\$ 332,433	\$ 336,357	\$ 244,025	\$ 214,225
Contributions in relation to the contractually required contribution	(362,553)	(332,433)	(336,357)	(244,025)	(214,225)
Contribution deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -
Authority's covered payroll	\$ 21,904,322	\$ 19,980,917	\$ 19,521,084	\$ 19,443,078	\$ 18,870,171
Contributions as a percentage of covered payroll	1.66%	1.66%	1.72%	1.26%	1.14%

These schedules are intended to show information for ten years and will be displayed as information becomes available

## Required Supplementary Information

For the fiscal year ended September 30, 2018

### Schedule of Changes in Total OPEB Liability and Related Ratios

October 1, (Measurement date)	<u>2017</u>
Service Cost	\$ 272,991
Interest	356,207
Benefit Changes	-
Difference Between Actual and Expected Experience	110,758
Assumption Changes	(681,938)
Benefit Payments	<u>(373,202)</u>
Net Change in Total OPEB Liability	(315,184)
Total OPEB Liability - beginning	<u>11,402,724</u>
Total OPEB Liability - ending	<u><u>\$ 11,087,540</u></u>
Covered Employee Payroll *	\$ 20,257,592
TOL as a Percentage of Covered Payroll:	54.73%

\*Covered employee payroll based on pay provided for the October 1, 2016 valuation projected to October 1, 2017. GASB 75 requires actual covered payroll for the measurement period

The schedule is intended to show information for ten years and will be displayed as information becomes available

# STATISTICAL SECTION

Financial Trends

Rates and Revenues

Debt

Demographic and Economic Information

Operating Information

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**FOR FISCAL YEAR ENDED  
SEPTEMBER 30, 2018**

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## Statistical Section Summary

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This section of the Comprehensive Annual Financial Report presents detailed information as a context for understanding what the information in the financial statements, note disclosures and supplementary information says about the Authority's overall financial health. The information is grouped into the categories described below.

### Contents

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#### Financial Trends

These schedules contain trend information to help the reader understand how the Authority's financial performance and well-being have changed over time. 76

#### Rates and Revenues

These schedules contain trend information to help the reader assess the Authority's ability to generate revenue through user fees. 78

#### Debt

These schedules present information which helps the reader assess the affordability of the Authority's current levels of outstanding debt. 80

#### Demographic and Economic Information

These schedules offer demographic and economic indicators that help the reader understand the environment with which the Authority's financial activities take place. 82

#### Operating Information

These schedules contain data to help the reader understand how the information in the Authority's financial report relates to the services provided. 88

## Financial Trends

### Schedule of Changes in Net Position and Schedule of Revenue and Expenses Last ten fiscal years (in thousands)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Revenue:</b>										
Operating revenue	\$ 57,624	\$ 55,891	\$ 54,588	\$ 50,618	\$ 48,562	\$ 46,668	\$ 44,739	\$ 45,961	\$ 42,837	\$ 41,829
Water surcharge	-	-	-	-	-	-	-	-	-	-
Other operating revenue	5,722	5,734	5,593	3,929	4,096	4,432	4,092	3,705	4,408	3,597
Less abatements	(412)	(352)	(371)	(294)	(333)	(431)	(414)	(404)	(437)	(510)
<b>Net operating revenue</b>	<b>62,934</b>	<b>61,273</b>	<b>59,810</b>	<b>54,253</b>	<b>52,325</b>	<b>50,669</b>	<b>48,417</b>	<b>49,262</b>	<b>46,808</b>	<b>44,916</b>
<b>Operating expenses:</b>										
Source of supply	727	753	812	701	622	507	695	678	644	669
Water treatment	3,861	3,903	3,783	3,670	3,617	3,450	3,329	2,959	2,828	3,015
Transmission & distribution	15,771	14,336	12,455	12,024	11,647	11,316	11,189	11,535	12,028	12,760
Wastewater treatment	1,434	1,462	3,467	943	859	878	834	713	565	499
Wastewater collection	3,918	2,212	17,075	1,319	1,159	1,090	1,071	991	969	906
Customer accounts	3,554	3,528	1,247	3,656	4,262	3,924	4,083	4,103	4,223	4,692
General & Administrative	20,264	18,569	1,871	15,736	15,862	12,981	12,801	12,581	12,723	12,433
Depreciation	15,395	15,495	15,350	14,975	14,964	14,576	14,386	14,443	12,401	12,178
<b>Total operating expenses</b>	<b>64,924</b>	<b>60,258</b>	<b>56,060</b>	<b>53,024</b>	<b>52,992</b>	<b>48,722</b>	<b>48,388</b>	<b>48,003</b>	<b>46,381</b>	<b>47,152</b>
<b>Utility operating income (loss)</b>	<b>(1,990)</b>	<b>1,015</b>	<b>3,750</b>	<b>1,229</b>	<b>(667)</b>	<b>1,947</b>	<b>29</b>	<b>1,259</b>	<b>427</b>	<b>(2,236)</b>
<b>Non-Operating revenue (expenses)</b>										
Interest income	690	447	293	244	319	346	357	369	449	1,075
Investment income	-	-	-	-	-	-	-	(757)	4,056	1,092
Other income (reimbursements)	908	605	535	548	556	722	326	376	57	192
Grants & reimbursements from federal & state agencies	-	-	-	-	-	-	8	8	30	20
Gain(Loss) on disposal of plant assets & inventory	(102)	(52)	66	11	(148)	57	50	(63)	(56)	(58)
Impairment loss	-	(965)	-	-	-	-	-	-	-	-
Interest expense	(5,877)	(5,862)	(5,677)	(5,332)	(5,682)	(6,053)	(5,959)	(5,661)	(5,643)	(5,755)
Amortization	(300)	(317)	-	-	-	-	-	-	(388)	(30)
Other expenses	(316)	(324)	(591)	(745)	(354)	(616)	(519)	(442)	(48)	(299)
<b>Total non-operating revenue (expenses)</b>	<b>(4,997)</b>	<b>(6,468)</b>	<b>(5,374)</b>	<b>(5,274)</b>	<b>(5,309)</b>	<b>(5,544)</b>	<b>(5,737)</b>	<b>(6,170)</b>	<b>(1,543)</b>	<b>(3,763)</b>
<b>Net income (Loss)</b>	<b>(6,987)</b>	<b>(5,453)</b>	<b>(1,623)</b>	<b>(4,044)</b>	<b>(5,976)</b>	<b>(3,597)</b>	<b>(5,708)</b>	<b>(4,911)</b>	<b>(1,116)</b>	<b>(5,999)</b>
Capital grants and contributions	3,734	7,743	1,950	2,093	1,540	1,666	1,364	1,371	4,829	(8,228)
Change in net position	(3,253)	2,290	327	(1,951)	(4,436)	(1,931)	(4,344)	(3,540)	3,713	(14,227)
Net position, beginning of year	144,704	142,414	142,087	156,072	160,509	162,440	166,784	173,226	169,513	183,740
Adjustment for restatement	(8,353)	-	-	(12,034)	-	-	-	(2,902)	-	-
<b>Net position, end of year</b>	<b>\$ 133,098</b>	<b>\$ 144,704</b>	<b>\$ 142,414</b>	<b>\$ 142,087</b>	<b>\$ 156,073</b>	<b>\$ 160,509</b>	<b>\$ 162,440</b>	<b>\$ 166,784</b>	<b>\$ 173,226</b>	<b>\$ 169,513</b>

## Financial Trends

### Schedule of Net Position by Component Last ten fiscal years (in thousands)

	(restated)									
	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Net investment in capital assets \$	133,017	130,534	137,153	135,293	136,145	136,638	130,549	127,586	126,277	123,401
Restricted										
Debt service	1,548	1,361	1,527	2,401	1,882	1,982	4,156	4,271	4,295	4,171
Capital projects	3,462	1,296	1,296	6,297	6,385	4,779	7,477	6,766	6,502	7,950
Other purposes	2,904	2,951	4,086	-	-	-	320	-	-	-
Unrestricted	(7,833)	209	(1,648)	(1,904)	11,661	17,110	19,938	28,161	36,152	33,991
<b>Total net position</b>	<b>\$ 133,098</b>	<b>\$ 136,351</b>	<b>\$ 142,414</b>	<b>\$ 142,087</b>	<b>\$ 156,073</b>	<b>\$ 160,509</b>	<b>\$ 162,440</b>	<b>\$ 166,784</b>	<b>\$ 173,226</b>	<b>\$ 169,513</b>

### Water Rates for Standard 5/8" Meter Last ten fiscal years

Fiscal Year	Base Charge	Gallonage				
		0-6,000 gallons	6,001-12,000 gallons	12,001-30,000 gallons	30,001-50,000 gallons	>50,000 gallons
2018	\$ 14.40	\$ 6.05	\$ 8.83	\$ 9.90	\$ 11.05	\$ 12.13
2017	14.12	5.93	8.66	9.71	10.83	11.89
2016	13.90	5.84	8.52	9.56	10.66	11.70
2015	13.75	5.78	8.43	9.46	10.55	11.58
2014	13.57	5.70	8.32	9.33	10.41	11.42
2013	13.43	5.64	8.24	9.23	10.30	11.30
2012	13.27	5.57	8.14	9.12	10.17	11.16
2011	13.04	5.47	8.00	8.96	9.99	10.97
2010	12.92	5.42	7.93	8.88	9.90	10.87
2009	12.86	5.39	7.89	8.84	9.85	10.82

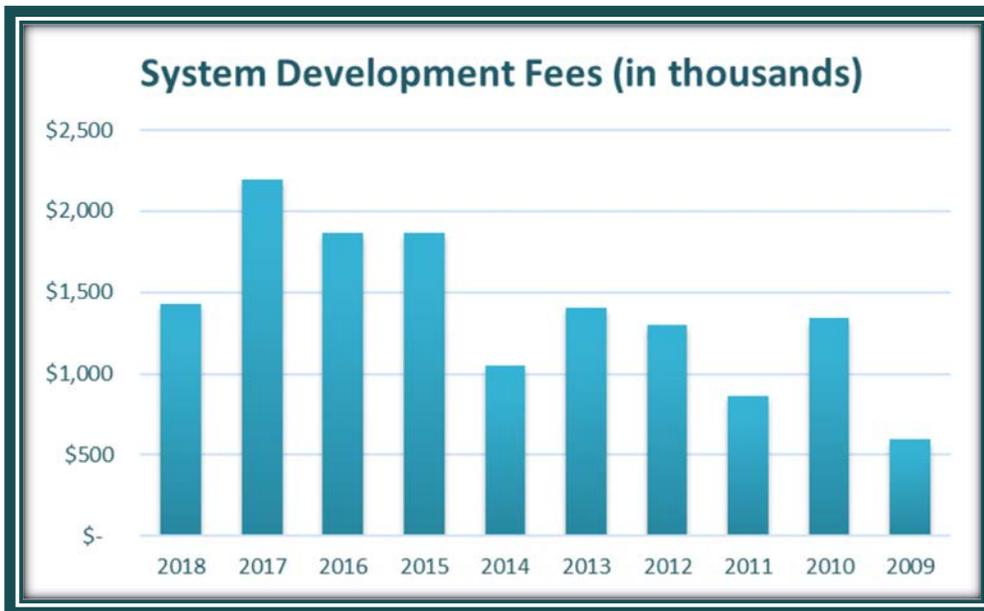
### Wastewater Rates for Standard 5/8" Meter Last ten fiscal years

Fiscal Year	Base Charge		0-10,000 gallons	
2018	\$ 24.66		\$ 9.33	
2017	24.18		9.15	
2016	28.00		10.60	
2015	27.70		10.49	
2014	27.33		10.35	
2013	27.05		10.24	
2012	26.72		10.11	
2011	26.26	- 49.42	7.71	- 9.94
2010	26.02	- 48.96	7.64	- 9.85
2009	25.90	- 48.73	7.60	- 9.80

## Rates and Revenues

### System Development Fees Collected Last ten fiscal years (in thousands)

Fiscal Year	System Development Fees Collected (000)
2018	\$ 1,427
2017	2,194
2016	1,866
2015	1,869
2014	1,052
2013	1,400
2012	1,302
2011	866
2010	1,341
2009	597



## Rates and Revenues (continued)

### Ten Largest Customers Fiscal years ended September 30, 2018 and 2009

#### 10 largest customers-year ended september 30, 2018

2018	Total Gallons		% of Water Revenue
	Consumed (000)	Total Water Revenues	
1 United States Navy	270,839	\$ 1,110,979	3.4%
2 City of Key West	58,242	604,943	1.9%
3 Marina Village Condo	15,278	161,241	1.8%
4 Cheeca Holdings LLC	15,839	181,520	1.1%
5 SH5 LTD	18,552	206,168	1.0%
6 Anglers Club Inc	19,006	210,863	0.8%
7 Monroe County Detention Center	29,741	350,809	0.7%
8 Resort Hotels of Key West	21,618	252,278	0.7%
9 Ocean Reef Club	31,948	314,283	0.6%
10 Monroe County School Board	33,585	326,405	0.6%

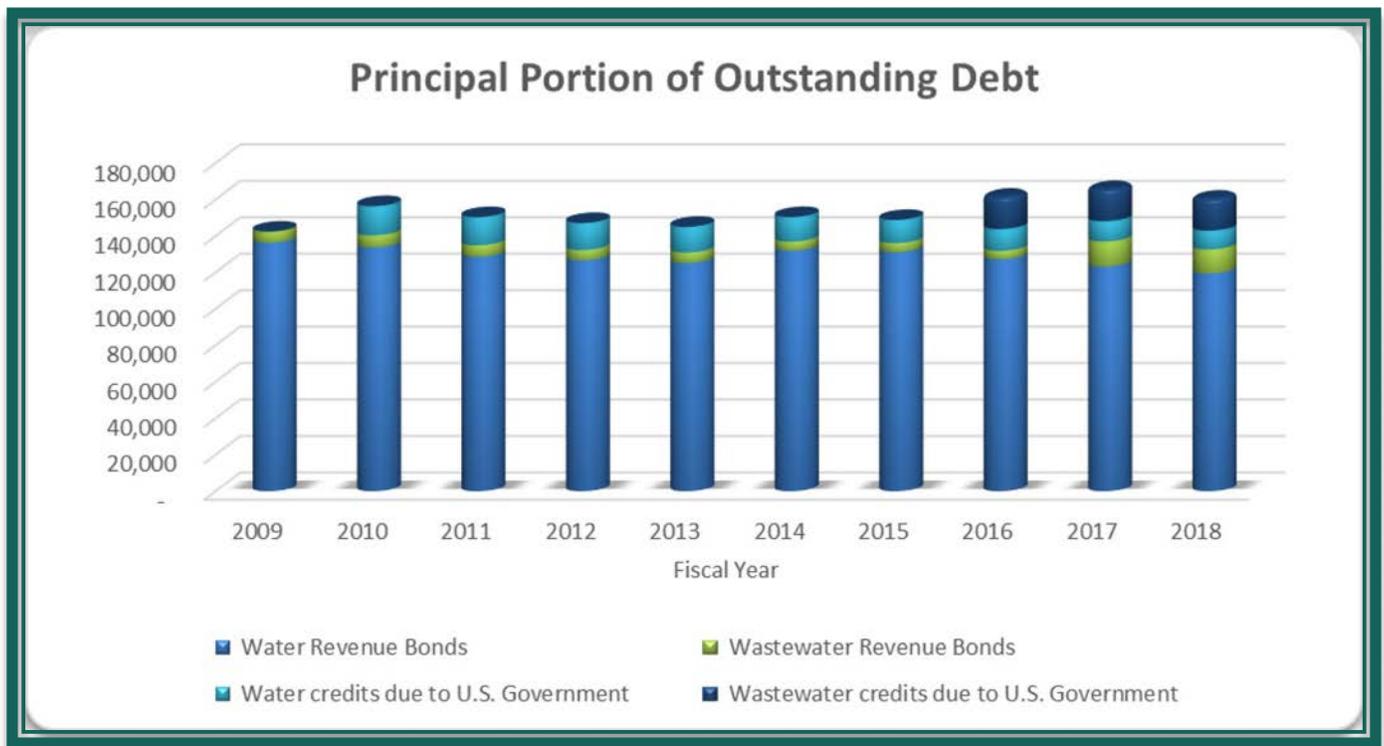
#### 10 largest customers-year ended september 30, 2009

2009	Total Gallons		% of Water Revenue
	Consumed (000)	Total Water Revenues	
1 United States Navy	242,906	\$ 845,972	2.0%
2 Monroe County	96,773	890,985	2.1%
3 BH/NW Hawks Cay Property Holding	81,840	745,144	1.7%
4 Caloosa Cove	35,582	562,294	1.3%
5 Heartland Hotel	26,996	259,903	0.6%
6 Ocean Reef Club Inc.	26,793	234,010	0.5%
7 KW Beach Suites LTD PA	22,800	227,246	0.5%
8 NHC FL 13 LP	20,714	212,713	0.5%
9 Venture Out of Cudjoe	20,216	183,332	0.4%
10 Angler's Club	17,426	169,419	0.4%

## Debt

### Principal Portion of Outstanding Debt Last ten fiscal years (in thousands)

Fiscal Year	Water Revenue Bonds	Water Revenue Premium	Wastewater Revenue Bonds	Total Bonds	Water credits due to U.S. Government	Wastewater credits due to U.S. Government	Totals	Total per Customer
2018	\$ 119,080	\$ 438	\$ 13,185	\$ 132,703	\$ 10,277	\$ 17,550	\$ 160,530	3
2017	122,850	461	13,760	137,071	11,125	17,640	165,836	3
2016	126,790	524	4,615	131,929	11,932	17,726	161,587	3
2015	130,595	591	4,960	136,146	12,700	-	148,846	3
2014	129,905	2,107	4,965	136,977	13,432	-	150,409	3
2013	123,085	2,199	5,635	130,919	14,128	-	145,047	3
2012	123,490	3,243	5,635	132,368	14,792	-	147,160	3
2011	126,105	2,566	6,280	134,951	15,423	-	150,374	3
2010	131,195	2,600	6,613	140,408	16,024	-	156,432	3
2009	133,679	2,633	6,124	142,436	-	-	142,436	3



## Debt (continued)

### Revenue Bond Coverage Last ten fiscal years (in thousands)

Fiscal Year	Gross Revenues (1)(3)	Operating Expenses (2)	Revenue Available for Debt Service	Debt Service Requirements	Coverage
<b>Water</b>					
2018	53,562	41,390	12,172	8,128	1.50
2017	53,855	38,800	15,055	8,652	1.74
2016	53,193	35,798	17,024	8,406	2.03
2015	51,372	35,786	15,291	8,342	1.83
2014	49,635	36,343	13,292	8,750	1.52
2013	48,759	32,610	16,149	8,082	2.00
2012	46,780	32,512	14,268	8,263	1.73
2011	48,164	32,259	15,905	8,293	1.92
2010	46,335	32,573	13,762	8,307	1.66
2009	46,162	34,080	12,082	7,798	1.55
<b>Wastewater</b>					
2018	10,448	8,552	1,896	856	2.21
2017	8,199	6,315	2,209	1,146	1.93
2016	7,592	498	2,684	482	5.57
2015	3,436	2,262	1,174	71	16.54
2014	2,987	2,018	1,302	492	2.65
2013	3,021	1,967	1,054	607	1.74
2012	2,737	1,905	832	621	1.34
2011	3,047	1,704	1,343	628	2.14
2010	2,455	1,497	958	478	2.00
2009	1,642	1,368	274	221	1.24

- (1) Includes revenue from sale of water, surcharges, fuel adjustment, meter tapping, service charges, miscellaneous operating revenues, interest income from investment of unrestricted accounts, less customer meter deposit interest expense and arbitrage.
- (2) Excludes depreciation and includes abatements due to leakage.
- (3) Gross revenue for wastewater includes those sources in (1) above plus system development fees.

## Demographic and Economic Information

### Population of Monroe County, Florida Selected Years 1980-2018

Year	Resident Population	Increase Decrease	Annual Percentage Change	Personal Income (in thousands)	Per Capita Income
1980	63,188	10,602	20.2%	577,294	9,060
1990	79,300	16,112	25.5%	1,771,001	22,636
2000	79,589	289	0.4%	2,946,305	37,019
2010	73,090	(6,499)	-0.9%	4,129,832	56,415
2011	72,670	(420)	-0.6%	4,354,126	58,941
2012	72,897	227	0.3%	4,245,050	56,745
2013	73,560	663	0.9%	4,415,284	57,829
2014	74,044	484	0.7%	5,368,160	69,593
2015	74,205	161	0.2%	5,765,374	74,409
2016	76,047	1,842	2.5%	5,869,890	74,230
2017	79,077	3,030	4.0%	6,417,335	83,328
<b>2018</b>	73,940	(5,137)	-6.5%	not available	



## Demographic and Economic Information (continued)

### Employment Statistics 2009-2018

Fiscal Year	Labor Force	Employment	Unemployment	Unemployment Rate
2018	45,317	43,816	1,501	3.3%
2017	46,318	44,939	1,379	3.0%
2016	46,789	45,290	1,499	3.2%
2015	44,165	42,548	1,617	3.7%
2014	50,044	48,231	1,813	3.6%
2013	49,103	47,137	1,966	4.0%
2012	47,658	45,091	2,567	5.4%
2011	49,662	46,178	3,484	7.6%
2010	44,491	40,990	3,502	7.9%
2009	45,833	42,954	2,880	6.3%

## Demographic and Economic Information (continued)

### Principal Employers Fiscal years ended September 30, 2018 and 2009

Employer	2018 Employees	Percentage of Employment
US Armed Forces (includes civilians support and contractors)	2,190	3.45%
Monroe County Schools	1,183	1.86%
Ocean Reef Club	1,123	1.77%
Monroe County Government	570	0.90%
Publix Stores	540	0.85%
Monroe County Sheriffs Office	539	0.85%
City of Key West	501	0.79%
Lower Keys Medical Center	437	0.69%
Casa Marina/Reach Resort	356	0.56%
Spottswood Properties	355	0.56%

Employer	2009 Employees	Percentage of Employment
US Armed Forces (includes civilians support and contractors)	1,227	3.30%
Monroe County Schools	1,100	3.00%
Ocean Reef Club	800	2.20%
Health Management Association	700	1.90%
Monroe County Sheriffs Office	600	1.60%
Starwood Hotel and Resort	520	1.40%
Marriott Hotels	430	1.20%
Winn Dixie	420	1.10%
Casa Marina Resort	410	1.10%
Sears/Kmart	410	1.10%

## Demographic and Economic Information (continued)

### Schedule of Customer Accounts Last ten fiscal years

Fiscal Year	Residential	Non Residential	U.S. Navy	Cruise Ships	Senior Citizens	Total
2018	43,706	5,972	20	5	1,928	51,631
2017	43,656	5,802	18	4	1,659	51,139
2016	43,343	5,446	18	4	1,393	50,204
2015	43,073	5,091	18	-	1,245	49,427
2014	42,753	4,965	18	4	1,346	49,086
2013	42,258	4,890	19	4	1,545	48,716
2012	42,401	4,829	21	4	1,408	48,663
2011	40,884	4,366	18	-	1,255	46,523
2010	40,911	4,219	20	-	948	46,098
2009	40,150	4,100	20	-	808	45,078

Note: Government is included in non-residential beginning October 1, 2009

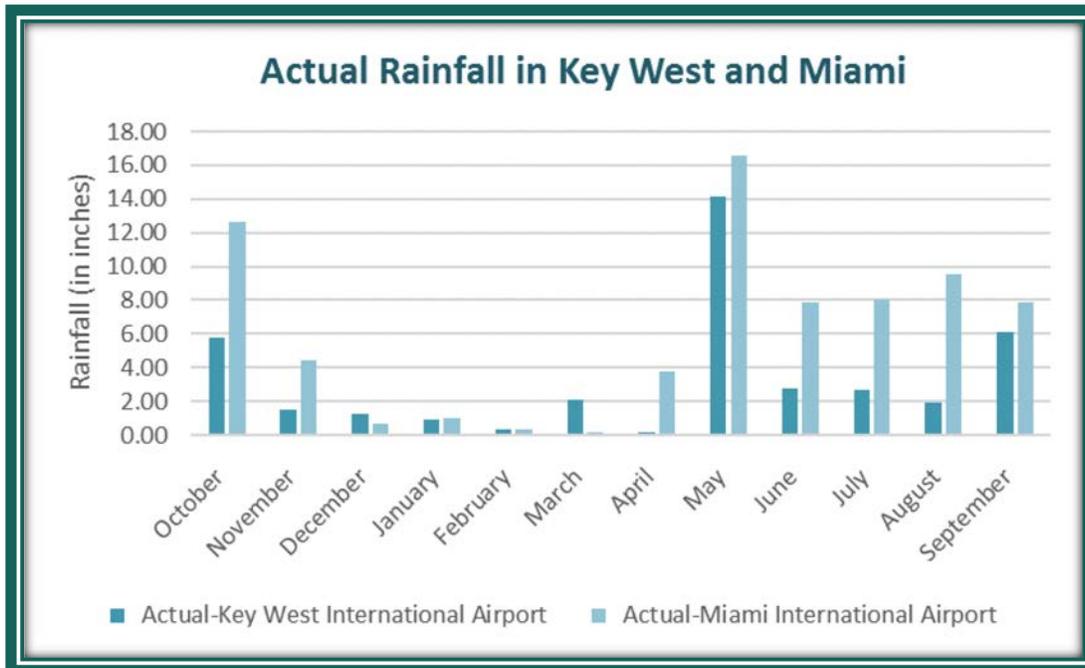
### Location of Customers Last ten fiscal years

Fiscal Year	Key West to Little Torch Key	Big Pine Key to Conch Key	Long Key to Ocean Reef	Total
2018	26,058	7,628	17,945	51,631
2017	22,890	10,528	17,721	51,139
2016	22,416	10,435	17,353	50,204
2015	21,976	10,293	17,158	49,427
2014	21,893	10,237	16,956	49,086
2013	21,789	10,124	16,803	48,716
2012	21,830	10,117	16,716	48,663
2011	20,823	9,638	16,062	46,523
2010	20,698	9,514	15,886	46,098
2009	20,007	9,373	15,698	45,078

## Demographic and Economic Information (continued)

**Monthly Rainfall** Fiscal year ended September 30, 2018 (in inches)

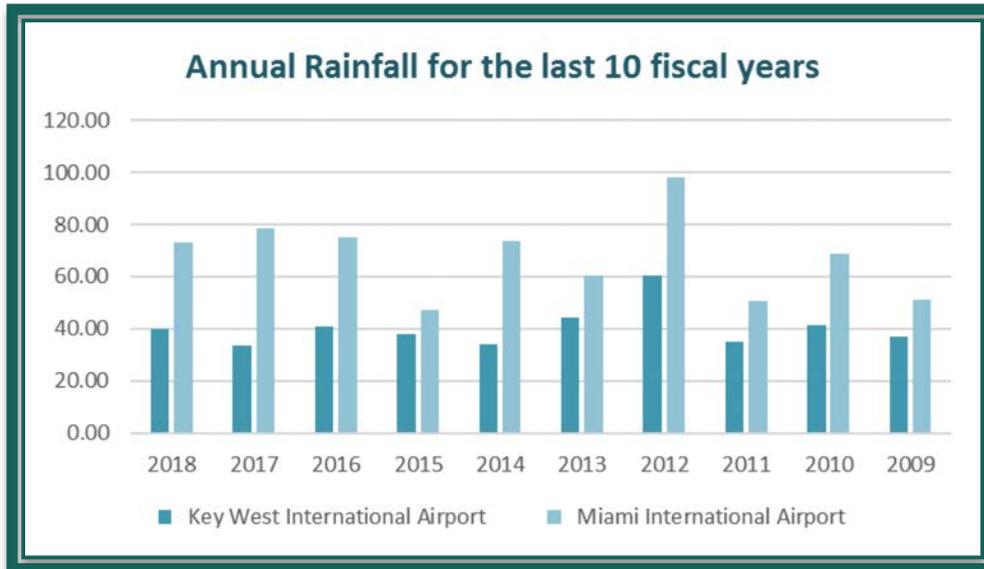
Month	Average-Key West International Airport	Actual-Key West International Airport	Average-Miami International Airport	Actual-Miami International Airport
October	2.04	5.81	1.62	12.61
November	1.49	1.51	2.25	4.41
December	2.05	1.28	3.00	0.66
January	2.05	0.90	3.14	1.01
February	3.00	0.34	5.34	0.37
March	4.11	2.12	9.67	0.19
April	3.55	0.21	6.50	3.80
May	5.38	14.17	8.88	16.59
June	6.71	2.80	9.86	7.89
July	4.93	2.69	6.33	8.02
August	2.30	1.89	3.27	9.58
September	2.22	6.08	2.04	7.89
Totals	39.83	39.80	61.90	73.02



## Demographic and Economic Information (continued)

### Annual Rainfall Last ten fiscal years (in inches)

Fiscal Year	Key West International Airport	Miami International Airport
2018	39.80	73.02
2017	33.49	78.33
2016	40.80	75.11
2015	37.88	47.22
2014	33.94	73.65
2013	44.43	60.58
2012	60.58	97.87
2011	35.05	50.56
2010	41.47	68.56
2009	36.84	51.25



## Operating Information

### Operating and Capital Indicators Last ten fiscal years

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Water</b>										
Water treatment plant permitted capacity	23.79 mgd									
Reverse osmosis permitted capacity	9 mgd	9 mgd	9 mgd	9mgd	9 mgd					
Miles of transmission main	181	181	187	187	187	187	187	187	187	187
Miles of distribution main	684	685	690	690	690	690	690	690	690	690
Number of pumping stations	26	26	26	26	26	25	25	25	25	25
Water storage capacity	46.4	48.4 mg	49.4 mg							
<b>Wastewater</b>										
Number of wastewater treatment plants	5	7	7	6	5	5	5	5	5	5
Combined permitted plant capacities	1.557 mgd	2.245 mgd	2.245 mgd	.92 mgd	.92 mgd	.92 mgd	.83 mgd	.83 mgd	.83 mgd	.5 mgd
Approximate miles of wastewater collection lines	252	252	195	195	49	49	49	49	49	44
Approximate miles of reclaimed water lines	25	25	25	14	14.32	14.32	3.47	1.90	1.90	1.90

Note: mgd=million gallons per day, mg=million gallons

## Operating Information, continued

### Water Production and Usage Last ten fiscal years

Water Production and Usage-Last Ten Fiscal Years  
(in thousands of gallons)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Water Available for Sale</b>										
Biscayne Aquifer	6,288,971	6,460,980	6,238,986	6,284,108	6,079,842	5,889,923	5,874,860	5,764,178	5,591,692	5,862,527
Floridan Aquifer	62,174	34,981	59,390	223,710	147,863	213,680	123,896	560,597	253,278	13,156
Desalinated sea water	-	12,886	-	-	-	-	-	-	-	72,614
Less water lost in production	-	-	-	50,295	70,146	6,123	-	-	-	-
<b>Total Water Available for Sale</b>	<b>6,351,145</b>	<b>6,508,847</b>	<b>6,298,376</b>	<b>6,558,113</b>	<b>6,297,851</b>	<b>6,109,726</b>	<b>5,998,756</b>	<b>6,324,775</b>	<b>5,844,970</b>	<b>5,948,297</b>
<b>Water Sales:</b>										
Residential	2,572,472	2,611,476	2,730,995	2,787,341	2,686,055	2,689,390	2,735,438	2,802,000	2,722,904	2,744,956
Non-Residential	2,010,654	2,052,054	2,007,041	1,907,458	1,826,920	1,770,246	1,686,189	1,709,284	1,675,373	1,665,133
U.S. Navy	270,840	274,729	254,324	274,413	273,266	273,584	290,151	274,047	239,671	242,906
City of Key West **	-	-	19,055	29,748	16,844	20,481	25,055	23,328	20,602	19,849
Cruise ship through Outer Mole	1,434	1,488	2,167	657	2,109	1,292	1,332	1,363	-	-
Senior Citizens	66,091	57,594	49,961	49,066	54,982	58,477	54,312	48,772	41,259	36,166
<b>Total Water Sold</b>	<b>4,921,491</b>	<b>4,997,341</b>	<b>5,063,543</b>	<b>5,048,683</b>	<b>4,860,176</b>	<b>4,813,470</b>	<b>4,792,477</b>	<b>4,858,794</b>	<b>4,699,809</b>	<b>4,709,010</b>
Other accounted for water*	477,641	644,046	745,439	545,417	228,813	336,096	268,283	889,391	568,266	674,231
<b>Total Accounted for Water</b>	<b>5,399,132</b>	<b>5,641,387</b>	<b>5,808,982</b>	<b>5,594,100</b>	<b>5,088,989</b>	<b>5,149,566</b>	<b>5,060,760</b>	<b>5,748,185</b>	<b>5,268,075</b>	<b>5,383,241</b>
Unaccounted for water	952,013	867,460	489,394	964,013	1,208,862	960,160	937,996	576,590	576,895	565,056
Unaccounted for water as a percentage of total water production	15.1%	13.3%	7.8%	18.4%	15.2%	15.4%	9.6%	9.1%	9.7%	5.8%
Average daily water production (million gallons/day)	17.40	17.83	17.26	17.25	16.74	16.43	17.33	17.33	16.00	16.30
Average daily water sales (million gallons/day)	13.48	13.69	13.87	13.32	13.19	13.13	13.31	13.31	12.90	12.90

\*Includes transmission line loss, distribution losses from line flushing and breaks and public uses for fire and cleaning. The method of identifying other accounted for water was modified in 2006.

\*\*The City of Key West water sales are now included in their respective categories

## Operating Information, continued

### Number of Employees by Activity Last ten fiscal years

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Water</b>										
Production	26	26	26	26	25	25	25	25	25	25
Transmission and distribution	80	78	80	83	83	82	82	81	81	80
Electrical and instrumental control	14	14								
<b>Wastewater</b>										
Treatment	17	11	13	13	13	9	8	6	6	7
Collection	15	16	7	7	8	4	5	6	6	6
<b>Engineering and Construction</b>										
Engineering	36	35	33	27	27	25	25	26	26	26
Construction	9	9	9	9	9	9	9	10	9	9
<b>Administration</b>										
Customer service	36	35	39	40	43	42	43	43	44	46
Finance, accounting and purchasing	30	30	29	29	24	24	25	25	25	25
Information Technology	11	11	26	25	26	22	22	21	20	19
Human Resources	4	4	4	5	7	8	5	4	4	6
<b>Executive</b>	8	8	8	8	8	8	8	8	8	8
<b>Totals</b>	<b>286</b>	277	274	272	273	258	257	255	254	257

## Operating Information, continued

### Additions to the Utility Plant by Class Last ten fiscal years (in thousands)

	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
Land	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 250
Building, structures and improvements	742	109	262	501	411	2,270	296	1,008	9,960	7,646
Equipment, vehicles, furniture and fixtures	1,900	2,200	1,948	1,296	1,159	1,026	1,025	664	585	717
Transmission system	4,747	-	-	347	3,663	-	178	1,146	8,640	-
Distribution systems	2,838	14,981	6,455	883	9,485	4,224	4,240	3,351	5,579	2,494
Water meters	780	543	190	303	97	569	2,335	1,998	1,999	2,636
Water storage facilities	-	-	-	1,291	-	803	-	-	-	-
Pumping stations	1,082	156	1,876	355	66	376	89	7	1,805	51
Water treatment facilities	177	126	145	16	444	132	23	393	204	6,254
Reverse osmosis equipment	-	-	96	-	636	-	-	-	22,878	-
Computer equipment	152	191	388	125	671	258	280	309	139	265
Wastewater treatment equipment	589	442	889	228	64	38	23	1,965	12	838
Collection system	7,839	-	1,459	-	30	-	-	-	6	320
Reclaimed system	-	-	-	-	78	2,373	-	411	1,820	-
	\$ 20,846	\$ 18,748	\$ 13,708	\$ 5,345	\$ 16,804	\$ 12,069	\$ 8,489	\$ 11,252	\$ 53,627	\$ 21,471

## Operating Information, continued

### Schedule of Insurance in Effect September 30, 2018

Type of Coverage	Carrier	Coverage Amount	Deductible Self-retention	Effective Date	Expiration Date
Liability package	Florida Municiple Insurance Trust FMIT#178		\$75,000 Stop Loss	10/1/2017	9/30/2018
General liability		\$10,000,000 occurrence	\$25,000		
Automobile liability		\$3,000,000 occurrence	\$25,000 Comp., \$1,000 PD, \$1,000 PIP		
Public officials liability		\$5,000,000 occurrence	\$25,000		
Drone Liability	Chubb AACN16733799001	\$10,000	\$1,000	2/1/2018	2/1/2019
Crime	Travelers / CR13001-0109	\$500,000	\$25,000	3/31/2018	3/31/2019
Property w/boiler and machinery	Westport- 50% NAP045658705 Ace American Insurance 25% EUTN14321214 Everest Indemnity 25% CA3P005784-181	\$167,874,835	Wind (named storms) 5% of location values \$250,000 min flood- Florida City only 5% of ins. Values with min. of \$1,000 ded. Boiler and machinery \$25,000	3/31/2018	3/31/2019
Flood building/contents	Bankers NFIP Various		Varies \$1,000 to \$3,000 for buildings and contents	10/16/17 12/07/17 4/27/18 5/14/18	10/16/18 12/07/2018 4/27/2019 5/14/2019
Worker's compensation	Florida Municipal Self Insurers FMIT 0178	Statutory	\$2,500/each injury	10/1/2017	10/1/2018
Pollution and environmental coverage	Ironshore Specialty / 1873801	\$10,000,000 aggregate pollution \$1,000,000 aggregate storage tank	\$10,000 25,000 Navy	12/23/2016	12/23/2019
Board members bonding	Fidelity & Deposit Various		\$10,000 per member	12/30/2015 12/31/2016	12/30/2018 12/31/2020
Fiduciary Insurance	Travellers / 106065534	\$1,000.000	No deductible	3/1/2017	3/1/2020

## Operating Information, continued

### Drinking Water Quality Standards and Analyses 2017/2018

Primary Drinking Water Standards (Refer to legend on next page)

Inorganic Contaminants	MCL mg/l*	2018 Finished Water mg/l*
Antimony	0.006	ND
Arsenic	0.010	0.00079
Asbestos	7 MFL	ND in 2017
Barium	2.0	0.0142
Beryllium	0.004	ND
Cadmium	0.005	ND
Chromium	0.100	ND
Cyanide	0.200	ND
Fluoride***	4.0	0.57
Lead	0.015	ND
Mercury	0.002	ND
Nickel	0.100	ND
Nitrate (as N)	10.0	3.5
Nitrite (as N)	1.0	ND
Total Nitrate (as N) & Nitrite	10.0	3.5
Selenium	0.050	0.0039
Sodium	160.0	23.6
Thallium	0.002	ND

Disinfectant By-Products	MCL mg/l*	2018 Distribution Water mg/l*
Trihalomethanes (THM)	0.080	0.0293
Haloacetic Acids (HAA)	0.060	0.0197

Radionuclides Contaminant	MCL pCi/l*	2018 Finished Water pCi/l*
Gross Alpha	15	3.36
Radium 226	5	0.898
Radium 228		ND

Volatile Organic Contaminants	MCL mg/l*	2018 Finished Water mg/l*
2,3,7,8-TCDD (Dioxin)	3 X 10 <sup>-8</sup>	ND
2,4-D	0.070	ND
2,4,5-TP (Silvex)	0.050	ND
1,1,2-Trichloroethane	0.005	ND
1,1-Dichloroethylene	0.007	ND
1,2,4-Trichlorobenzene	0.070	ND
1,2-Dichloroethane	0.003	ND
1,2-Dichloropropane	0.005	ND
Benzene	0.001	ND
Carbon tetrachloride	0.003	ND
cis-1,2-Dichloroethylene	0.070	ND
Dichloromethane	0.005	ND
Ethylbenzene	0.700	ND
Chlorobenzene	0.100	ND
o-Dichlorobenzene	0.600	ND
para-Dichlorobenzene	0.075	ND
Styrene	0.100	ND
Tetrachloroethylene	0.003	ND
Toluene	1.000	ND
trans-1,2-Dichloroethylene	0.100	ND
Trichloroethylene	0.003	ND
Vinyl chloride	0.001	ND
Xylenes	10.0	ND

Pesticides & PCB Contaminants	MCL mg/l*	2018 Finished Water mg/l*
2,3,7,8-TCDD (Dioxin)	3 X 10 <sup>-8</sup>	ND
2,4-D	0.070	ND
2,4,5-TP (Silvex)	0.050	ND
Alachlor	0.002	ND
Atrazine	0.003	ND
Benzo(a)pyrene	0.000	ND
Carbofuran	0.040	ND
Chlordane	0.002	ND
Dalapon	0.200	ND
Di(2-ethylhexyl)adipate	0.400	ND
Di(2-ethylhexyl)phthalate	0.006	ND
Dibromochloropropane (DBCP)	0.000	ND
Dinoseb	0.007	ND
Diquat	0.020	ND
Endothall	0.100	ND
Endrin	0.002	ND
Ethylene dibromide (EDB)	0.000	ND
Glyphosate	0.700	ND
Heptachlor	0.000	ND
Heptachlor epoxide	0.000	ND
Hexachlorobenzene	0.001	ND
Hexachlorocyclopentadiene	0.050	ND
Lindane	0.000	ND
Methoxychlor	0.040	ND
Oxamyl (Vydate)	0.200	ND
Pentachlorophenol	0.001	ND
Picloram	0.500	ND
Polychlorinated biphenyls (PCBs)	0.001	ND
Simazine	0.004	ND
Toxaphene	0.003	ND

Turbidity Level	MCL NTU	2018 Finished Water NTU
Turbidity	1.0	0.08

## Operating Information, continued

### Drinking Water Quality Standards and Analyses 2017/2018

#### Secondary Drinking Water Standards

Secondary Contaminant	MCL mg/l*	2018 Finished Water mg/l*
Aluminum	0.20	ND
Chloride	250	45.1
Color	15 Color Units	5 Color Units
Copper	1.0	0.0017
Fluoride	2.0	0.57
Foaming Agents (MBAS)	0.50	ND
Iron	0.30	ND
Manganese	0.05	ND
Odor	3 TON	ND
pH**	6.5 - 8.5	9.3
Silver	0.10	ND
Sulfate	250	44.2
Total Dissolved Solids (TDS)	500	220
Zinc	5.0	ND

General	2018 Finished Water mg/l*
Total Hardness	102
(Hardness in grains per gallon)	6.0
Calcium Hardness	86
Alkalinity	41
Total Chlorine	4.2

MCL = Maximum Contaminant Level

MFL = Million Fibers per Liter greater than 10 micrometers

ND = Analyzed for but not detected/value is below reportable limits

NR = Not required

NTU = Nephelometric Turbidity Units

pCi/l = picocuries per liter

TON = Threshold Odor Number

\*mg/l = milligrams per liter (except asbestos, color, odor, and pH)

\*\*pH has no health effects. FCAA maintains pH at 9.0 - 9.5 to aid in corrosion control and to improve disinfection stability.

\*\*\*Fluoride also has a secondary standard

**Note:** The primary drinking water standards are established for health reasons, while secondary drinking water standards are established for aesthetic reasons. The MCL is the maximum allowable level a regulated contaminant should be present in drinking water. The finished water results indicate the measured level that is found in FCAA drinking water.

# REPORTING SECTION

Independent Auditors' Report on Internal Control Over Financial Reporting on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards

Independent Auditors' Report on Compliance for Each Major State Project: Report on Internal Control Over Compliance, and Report on Schedule of Expenditures of State Financial Assistance Required by Chapter 10.550, Rules of the Auditor General

Schedule of Expenditures of State Financial Assistance

Notes to Schedule of Expenditures of State Financial Assistance

Summary Schedule of Prior Audit Findings

Schedule of Findings and Question Costs

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**FOR FISCAL YEAR ENDED  
SEPTEMBER 30, 2018**

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## Independent Auditors' Report

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### INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Audit Committee, Board of Directors and Executive Director  
**Florida Keys Aqueduct Authority**

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Florida Keys Aqueduct Authority (the Authority), which comprise the statement of net position as of September 30, 2018 and the related statements of revenues, expenses and changes in net position and cash flows for the fiscal year then ended, and the related notes to the financial statements, and have issued our report thereon dated April 11, 2019.

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

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

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

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



## Independent Auditors' Report (continued)

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### ***Compliance and Other Matters***

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

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

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

*Marcum LLP*

Miami, FL

April 11, 2019

## Independent Auditors' Report (continued)

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### INDEPENDENT AUDITORS' REPORT ON COMPLIANCE FOR EACH MAJOR STATE PROJECT; REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON SCHEDULE OF EXPENDITURES OF STATE FINANCIAL ASSISTANCE REQUIRED BY CHAPTER 10.550, RULES OF THE AUDITOR GENERAL

To the Audit Committee, Board of Directors and Executive Director

#### Florida Keys Aqueduct Authority

#### ***Report on Compliance for Major State Project***

We have audited Florida Keys Aqueduct Authority (the Authority) compliance with the types of compliance requirements described in the *Florida Department of Financial Services' State Projects Compliance Supplement* that could have a direct and material effect on the Authority's major state project for the fiscal year ended September 30, 2018. The Authority's major state project is identified in the summary of auditors' results section of the accompanying schedule of findings and questioned costs.

#### ***Management's Responsibility***

Management is responsible for compliance with State statutes, regulations, and the terms and conditions of its state projects.

#### ***Auditors' Responsibility***

Our responsibility is to express an opinion on compliance for the Authority's state project based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Chapter 10.550, Rules of the Auditor. Those standards and Chapter 10.550, Rules of the Auditor General, require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major state project occurred. An audit includes examining, on a test basis, evidence about the Authority's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.



## Independent Auditors' Report (continued)

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We believe that our audit provides a reasonable basis for our opinion on compliance for the major state project. However, our audit does not provide a legal determination of the Authority's compliance.

### ***Opinion on Major State Project***

In our opinion, the Authority complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on the major state project for the fiscal year ended September 30, 2018.

### ***Report on Internal Control Over Compliance***

Management of the Authority is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the Authority's internal control over compliance with the types of requirements that could have a direct and material effect on its major state project to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for its major state project and to test and report on internal control over compliance in accordance with Chapter 10.550, Rules of the Auditor General, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the Authority's internal control over compliance.

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

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

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of Chapter 10.550, Rules of the Auditor General. Accordingly, this report is not suitable for any other purpose.

## Independent Auditors' Report (continued)

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### ***Report on Schedule of Expenditures of State Financial Assistance Required by Chapter 10.550, Rules of the Auditor General***

We have audited the financial statements of the Authority as of and for the fiscal year ended September 30, 2018, and have issued our report thereon dated April 11, 2019, which contained an unmodified opinion on those financial statements. Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The accompanying schedule of expenditures of state financial assistance is presented for purposes of additional analysis as required by Chapter 10.550, Rules of the Auditor General and is not a required part of the 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 financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the 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 expenditures of state financial assistance is fairly stated in all material respects in relation to the financial statements as a whole.

*Marcum LLP*

Miami, FL

April 11, 2019

## Schedule of Expenditures of State Financial Assistance

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**FLORIDA KEYS AQUEDUCT AUTHORITY**  
**SCHEDULE OF EXPENDITURES OF STATE FINANCIAL ASSISTANCE**  
**FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018**

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State Agency/Program	CSFA Number	Grant Contract #	Expenditures
<i>State of Florida Department of Environmental Protection</i>			
<b>Direct Program:</b>			
Statewide Surface Water Restoration and Wastewater Projects	37.039	LP44020	\$ 1,045,074
<i>Total State of Florida Department of Environmental Protection</i>			<u>1,045,074</u>
<i>Total Expenditures of State Financial Assistance</i>			<u>\$ 1,045,074</u>

*See notes to schedule of expenditures of state financial assistance.*

## **Notes to Schedule of Expenditures of State Financial Assistance**

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### **FLORIDA KEYS AQUEDUCT AUTHORITY**

#### **NOTES TO SCHEDULE OF EXPENDITURES OF STATE FINANCIAL ASSISTANCE**

#### **FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018**

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##### **1. BASIS OF PRESENTATION**

The accompanying schedule of expenditures of state financial assistance (the Schedule) includes the state grant activity of the Florida Keys Aqueduct Authority (the Authority) under projects of the State of Florida for the fiscal year ended September 30, 2018. The information in this schedule is presented in accordance with the requirements of Chapter 10.550, Rules of the Auditor General. Because the Schedule presents only a selected portion of the operations of the Authority, it is not intended to and does not present the financial position, changes in net position or cash flows of the Authority.

##### **2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

Expenditures reported on the Schedule are reported on the accrual basis of accounting. Such expenditures are recognized following the cost principles contained in the Florida Single Audit Act, where certain types of expenditures are not allowable or are limited as to reimbursements.

## Summary Schedule of Prior Audit Findings

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**FLORIDA KEYS AQUEDUCT AUTHORITY**  
**SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS**  
**FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018**

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*PRIOR YEAR FINANCIAL STATEMENT FINDINGS*

None.

*PRIOR YEAR FEDERAL AWARD FINDINGS AND QUESTIONED COSTS*

The Authority was not subject to an audit under OMB Uniform Guidance in the fiscal year ended September 30, 2018.

*PRIOR YEAR STATE PROJECTS FINDINGS AND QUESTIONED COSTS*

The Authority was not subject to the Florida Single Audit Act as it relates to Chapter 10.550, Rules of the Auditor General, in the fiscal year ended September 30, 2017.

## Schedule of Findings and Question Costs

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**FLORIDA KEYS AQUEDUCT AUTHORITY**  
**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**  
**FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018**

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**SECTION I - SUMMARY OF AUDITORS' RESULTS**

**Financial Statements**

Type of auditors' report issued: *Unmodified Opinion*

Internal control over financial reporting:

Material weakness(es) identified?  Yes  No

Significant deficiency(ies) identified not considered to be material weakness(es)?  Yes  None reported

Non-compliance material to financial statements noted?  Yes  No

**State Project**

Internal control over the major state project:

Material weakness(es) identified?  Yes  No

Significant deficiency(ies) identified that are not considered to be material weakness(es)?  Yes  None reported

Type of auditors' report issued on compliance for the major State project: *Unmodified Opinion*

Any audit findings disclosed that are required to be reported in accordance with Chapter 10.557, Rules of the Auditor General?  Yes  No

Identification of the major state project:

<u>State Project</u>	<u>CSFA No.</u>
Statewide Surface Water Restoration and Wastewater Projects	37.039

Dollar threshold used to distinguish between Type A and Type B projects: N/A – Only 1 Project

## Schedule of Findings and Question Costs

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**FLORIDA KEYS AQUEDUCT AUTHORITY**  
**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**  
**FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018**

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**SECTION II – FINANCIAL STATEMENT FINDINGS**

None.

**SECTION III – STATE PROJECT FINDINGS AND QUESTIONED COSTS**

None.

# AUDITOR GENERAL SECTION

Management Letter in Accordance with the Rules of the  
Auditor General of the State of Florida

Independent Accountants' Report on Compliance  
Pursuant to Section 218.415 Florida Statutes

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**FOR FISCAL YEAR ENDED  
SEPTEMBER 30, 2018**

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## Management Letter

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### MANAGEMENT LETTER IN ACCORDANCE WITH THE RULES OF THE AUDITOR GENERAL OF THE STATE OF FLORIDA

To the Audit Committee, Board of Directors and Executive Director  
**Florida Keys Aqueduct Authority**

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

We have audited the financial statements of the Florida Keys Aqueduct Authority, as of and for the fiscal year ended September 30, 2018, and have issued our report thereon dated April 11, 2019.

#### ***Auditors' Responsibility***

We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States; and Chapter 10.550, Rules of the Auditor General.

#### ***Other Reporting Requirements***

We have issued our Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards; Independent Auditors' Report on Compliance for Each Major State Project; Report on Internal Control Over Compliance; and Report on Schedule of Expenditures of State Financial Assistance; Summary Schedule of Prior Audit Findings; and Schedule of Findings and Questioned Costs; and Independent Accountants' Report on an examination conducted in accordance with AICPA Professional Standards, AT-C Section 315, regarding compliance requirements in accordance with Chapter 10.550, Rules of the Auditor General. Disclosures in those reports and schedules, which are dated April 11, 2019, should be considered in conjunction with this management letter.

#### ***Prior Audit Findings***

Section 10.554(l)(i)l., Rules of the Auditor General, requires that we determine whether or not corrective actions have been taken to address findings and recommendations made in the preceding annual financial audit report. There were no findings or recommendations made in the prior year audit report.



## Management Letter (continued)

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### ***Official Title and Legal Authority***

Section 10.554(1)(i)4., Rules of the Auditor General, requires that the name or official title and legal authority for the primary government and each component unit of the reporting entity be disclosed in this management letter, unless disclosed in the notes to the financial statements. The Authority was established by Special Legislation 76-441 of the Laws of Florida. There are no component units.

### ***Financial Condition and Management***

Section 10.554(1)(i)5.a. and 10.556(7), Rules of the Auditor General, require us to apply appropriate procedures and communicate the results of our determination as to whether or not the Authority has met one or more of the conditions described in Section 218.503(1), Florida Statutes, and identification of the specific condition(s) met. In connection with our audit, we determined that the Authority did not meet any of the conditions described in Section 218.503(1), Florida Statutes.

Pursuant to Sections 10.554(1)(i)5.b. and 10.556(8), Rules of the Auditor General, we applied financial condition assessment procedures. It is management's responsibility to monitor the Authority's financial condition, and our financial condition assessment was based in part on the financial condition representations made by management and the review of financial information provided by same. The financial condition assignment was performed at fiscal year end.

Section 10.554(1)(i)2., Rules of the Auditor General, requires that we communicate any recommendations to improve financial management. In connection with our audit, we did not have any such recommendations.

### ***Additional Matters***

Section 10.554(1)(i)3., Rules of the Auditor General, requires us to communicate noncompliance with provisions of contracts or grant agreements, or abuse, that have occurred, or are likely to have occurred, that have an effect on the financial statements that is less than material but which warrants the attention of those charged with governance. In connection with our audit, we did not note any such findings.

### ***Purpose of this Letter***

Our management letter is intended solely for the information and use of the Legislative Auditing Committee, members of the Florida Senate and the Florida House of Representatives, the Florida Auditor General, Federal, State, and other granting agencies, the Boards of Directors, the Audit Committee, and applicable management, and is not intended to be and should not be used by anyone other than these specified parties.

*Marcum LLP*

Miami, FL

April 11, 2019

## Independent Accountants' Report

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### INDEPENDENT ACCOUNTANTS' REPORT ON COMPLIANCE PURSUANT TO SECTION 218.415 FLORIDA STATUTES

To the Audit Committee, Board of Directors and Executive Director

#### Florida Keys Aqueduct Authority

We have examined the Florida Keys Aqueduct Authority's (the Authority) compliance with Section 218.415, Florida Statutes, Local Government Investment Policies during the fiscal year ended September 30, 2018. Management is responsible for the Authority's compliance with those requirements. Our responsibility is to express an opinion on the Authority's compliance based on our examination.

Our examination was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the examination to obtain reasonable assurance about whether the Authority complied, in all material respects, with the specified requirements referenced above. An examination involves performing procedures to obtain evidence about whether the Authority complied with the specified requirements. The nature, timing, and extent of the procedures selected depend on our judgment, including an assessment of the risks of material noncompliance, whether due to fraud or error. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Our examination does not provide a legal determination on the Authority's compliance with specified requirements.

In our opinion, the Florida Keys Aqueduct Authority complied, in all material respects, with Section 218.415 Florida Statutes for the fiscal year ended September 30, 2018.

This report is intended to describe our testing of compliance with Section 218.415 Florida Statutes and it is not suitable for any other purpose.

*Marcum LLP*

Miami, FL

April 11, 2019