



900 Magazine Rd.  
Petersburg, VA 23803  
Office: (804) 861-0111  
Fax: (804) 861-3254

**DATE:** November 16, 2017

**TIME:** 2:00 PM

**LOCATION:** South Central Wastewater Authority  
Conference Room, Administration Building  
900 Magazine Road  
Petersburg, Virginia 23803

## **AGENDA**

1. Call to Order/Roll Call
2. Approval of Minutes: Minutes of the Regular Meeting of the Board on September 21, 2017
3. Public Comment
4. Executive Director's Report
  - Annual Financial Report Year Ended June 30, 2017: Robinson, Farmer, Cox Associates
  - Status Report: Ongoing Projects/Operational and Financial/Inflow and Infiltration
  - Proposed 2018 Board Meeting Dates
5. Items from Counsel
6. Closed Session
7. Other Items from Board Members/Staff Not on Agenda
8. Adjourn

Cc:W. Dupler/George Hayes, Chesterfield  
J. Byerly, Petersburg Public Works  
W. Henley, Colonial Heights  
K. Massengill, Dinwiddie County  
A. Anderson, McGuire Woods

**1. Call to Order/Roll Call**

**2. Approval of Minutes: Minutes of the Regular Meeting of the Board on September 21, 2017**

Following are the minutes of the Regular Meeting of the South Central Wastewater Authority Board of Directors on September 21, 2017.

Absent any corrections or revisions, we recommend approval of the minutes as submitted.

## **BOARD OF DIRECTORS MEETING**

**South Central Wastewater Authority**

**September 21, 2017 at 2:00 p.m.**

**Location: Appomattox River Water Authority  
21300 Chesdin Road, S. Chesterfield, Virginia**

### **PRESENT:**

Percy Ashcraft, Chairman (Prince George)  
George Hayes, Secretary/Treasurer (Alternate, Chesterfield)  
Joseph Casey, (Chesterfield)  
Robert B. Wilson, (Dinwiddie)  
Aretha Ferrell-Benavides, (Petersburg)  
Kevin Massengill, (Alternate, Dinwiddie)  
Douglas Smith, (Alternate, Colonial Heights)  
Jerry Byerly, (Alternate, Petersburg)  
Dickie Thompson, (Alternate, Prince George)  
William Dupler, (Alternate, Chesterfield)

### **ABSENT:**

William Henley, Vice-Chairman (Colonial Heights)  
Daniel Harrison (Alternate, Petersburg)

### **STAFF:**

Robert C. Wichser, Executive Director, (ARWA & SCWWA)  
James C. Gordon, Asst. Executive Director (ARWA & SCWWA)  
Arthur Anderson, (McGuire Woods)  
Melissa Wilkins, Accounting/Office Manager (ARWA & SCWWA)  
Kathy Summerson, Administrative Assistant (SCWWA)

### **OTHERS:**

Mike Wooden, (Arcadis)  
Herb White, (WW Associates)  
Chris Tabor, (Hazen & Sawyer)  
Roger Arnold, (Hazen & Sawyer)  
Ted Cole, (Davenport & Company, LLC)

Mr. Ashcraft, Chairman, called the meeting to order at 3:40 p.m.

#### **1. Call to Order/Roll Call.**

The roll was called.

#### **2. Approval of Minutes: Minutes of the Regular Board Meeting on August 17, 2017:**

Upon a motion made by Mr. Wilson and seconded by Dr. Casey the following resolution was adopted:

**RESOLVED, that the minutes of the Regular Meeting of the Board on August 17, 2017 are hereby approved:**

**For: 5                  Against: 0                  Abstain: 0**

#### **3. Public Comment**

There were no public comments.

#### **6. Closed Session**

Mr. Anderson read the Resolution to go into Closed Session (attached).

Upon a motion made by Mr. Smith and seconded by Ms. Ferrell-Benavides the Board went into Closed Session at 3:41 p.m.

**For: 5                  Against: 0                  Abstain: 0**

Upon a motion made by Mr. Wilson and seconded by Ms. Ferrell-Benavides the Board came out of Closed Session at 4:29 p.m.

**For: 5                  Against: 0                  Abstain: 0**

Mr. Anderson read the Certification regarding the Closed Session and, upon a motion made by Mr. Massengill and seconded by Mr. Smith, it was approved by a unanimous roll call vote (attached).

#### **4. Executive Director's Report**

##### **• Election of Vice Chairman**

Mr. Ashcraft stated we are absent a Vice Chairman for the Authority. Dr. Casey nominated Mr. Smith as Vice Chairman.

Mr. Smith was elected Vice Chairman of SCWWA for the term ending December 2018 upon a motion made by Ms. Ferrell-Benavides and seconded by Mr. Wilson:

**For: 5      Against: 0      Abstain: 0**

- **Recommendation on Award of Wastewater Treatment Improvement Project**

Dr. Wichser reported on the recommended award of the Phase 2 Wastewater Treatment Improvement Project. He stated this project was advertised for bids on June 25, 2017 and a pre-bid conference was held on July 12, 2017. He further stated the bids were opened on August 9, 2017. He reported this project is being paid for out of the O&M budget. This was a Board approved project in the last fiscal year and did not commence due to capital spending being frozen in the first six months and O&M expenses being held to a minimum.

Upon a motion made by Mr. Wilson and seconded by Mr. Smith the following resolution was adopted:

**RESOLVED, that the Board of Directors authorize the Executive Director to carry-over from the 2016-2017 fiscal year grit replacement funds of \$650,000 and award the SCWWA Wastewater Treatment Improvement Project to Anderson Construction of Lynchburg, Virginia in the amount of \$984,000, and that the Executive Director be authorized to executed necessary change orders in additional amounts, if deemed necessary to complete this project, not to exceed ten percent of the total project costs (\$105,050):**

**For: 5      Against: 0      Abstain: 0**

- **Status Report: Ongoing Projects/Financials**

Mr. Gordon reported on the Status Report of Ongoing Projects/Financials and I&I.

- **Staff Recommendation on Establishment of a Capital Upgrade Account**

This item was deferred until a later date.

**5. Items from Counsel**

There were no items from Counsel.

**7. Other Items from Board Members/Staff Not on Agenda**

With Staff's recommendation on the Establishment of a Capital Upgrade Account being tabled until a later date, Mr. Ashcraft stated that a committee should be formed to address this matter. Mr. Ashcraft stated that he would be on the committee and Mr. Smith should Chair the committee and requested that Mr. Wichser provide suggested meeting dates and times in October for a work session to be held.

**8. Adjourn**

Upon a motion made by Mr. Wilson and seconded by Dr. Casey the meeting was adjourned at 4:45 p.m.

The next regularly scheduled Board meeting is Thursday, November 16, 2017 at 2:00 p.m. at the South Central Wastewater Authority.

MINUTES APPROVED BY:

---

**George Hayes**  
**Secretary/Treasurer**

## **CLOSED MEETING RESOLUTION**

### **SOUTH CENTRAL WASTEWATER AUTHORITY**

**September 21, 2017**

I move that we go into a closed meeting for (i) consultation with legal counsel retained by the South Central Wastewater Authority (the "Authority") regarding specific legal matters requiring the provision of legal advice by such counsel as permitted by Section 2.2-3711A.7. of the Virginia Freedom of Information Act ("FOIA") and (ii) discussion and consideration of the assignment, appointment, promotion, performance, demotion, salaries, disciplining, or resignation of specific public officers, appointees, or employees of the Authority, as permitted by Section 2.2-3711A.1. of FOIA:

MOTION: Smith

SECOND: Ferrell-Benavides

#### **VOTE**

Ashcraft	Aye
Casey	Aye
Ferrell-Benavides	Aye
Smith	Aye
Wilson	Aye

ABSENT DURING VOTE: None.

ABSENT DURING CLOSED MEETING: None.

SESSION DATE: September 21, 2017

### **CERTIFICATION OF CLOSED MEETING**

WHEREAS, the Board of the South Central Wastewater Authority (the "Authority") convened a closed meeting on September 21, 2017, pursuant to an affirmative recorded vote and in accordance with the provisions of the Virginia Freedom of Information Act; and

WHEREAS, Section 2.2-3712 of the Code of Virginia requires a certification by this Board that such closed meeting was conducted in conformity with Virginia law;

NOW THEREFORE, BE IT RESOLVED that the Board of the Authority hereby certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by the Virginia Freedom of Information Act were discussed in the closed meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion convening the closed meeting were heard, discussed or considered by the Board.

MOTION: Wilson

SECOND: Ferrell-Benavides

#### **VOTE**

Ashcraft	Aye
Casey	Aye
Ferrell-Benavides	Aye
Smith	Aye
Wilson	Aye

ABSENT DURING VOTE: None.

ABSENT DURING CLOSED MEETING: None.

### 3. Public Comment

The Guidelines for Public Comment are:

#### **GUIDELINES FOR PUBLIC COMMENT AT SCWWA/ARWA BOARD OF DIRECTORS MEETINGS**

If you wish to address the SCWWA/ARWA Board of Directors during the time allocated for public comment, please raise your hand or stand when the Chairman asks for public comments.

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for “Public Comment Period.” Each person will be allowed to speak for up to three minutes.

When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

During the Public Comment Period, the Board will attempt to hear all members of the public who wish to speak on a subject, but it must be recognized that on rare occasion presentations may have to be limited because of time constraints. If a previous speaker has articulated your position, it is recommended that you not fully repeat the comments and instead advise the Board of your agreement. The time allocated for speakers at public hearings are the same as for regular Board meeting, although the Board can allow exceptions at its discretion.

Speakers should keep in mind that Board of Directors meetings are formal proceedings and all comments are recorded on tape. For that reason, speakers are requested to speak from the podium and wait to be recognized by the Chairman. In order to give all speakers proper respect and courtesy, the Board requests that speakers follow the following guidelines:

- Wait at your seat until recognized by the Chairman;
- Come forward and state your full name and address. If speaking for a group, state your organizational affiliation;
- Address your comments to the Board as a whole;
- State your position clearly and succinctly and give facts and data to support your position;
- Summarize your key points and provide the Board with a written statement or supporting rationale, when possible;
- If you represent a group, you may ask others at the meeting to be recognized by raising their hand or standing;
- Be respectful and civil in all interactions at Board meetings;
- The Board may ask speakers questions or seek clarification, but recognize that Board meetings are not a forum for public debate; Board Members will not recognize comments made from the audience and ask that members of the audience not interrupt the comments of speakers and remain silent while others are speaking so that other members in the audience can hear the speaker;
- The Board will have the opportunity to address public comments after the Public Comment Period has been closed;
- At the request of the Chairman, the Executive Director may address public comments after the session has been closed as well; and
- As appropriate, staff will research questions by the public and respond through a report back to the Board at the next regular meeting of the full Board. It is suggested that citizens who have questions for the Board or staff submit those questions in advance of the meeting to permit the opportunity for some research before the meeting.

#### **4. Executive Director's Report**

- **Annual Financial Report Year Ended June 30, 2017: Robinson, Farmer, Cox Associates**

Following is the Annual Comprehensive Financial Report prepared and presented by Robinson, Farmer, Cox Associates.



# ROBINSON, FARMER, COX ASSOCIATES

A PROFESSIONAL LIMITED LIABILITY COMPANY

CERTIFIED PUBLIC ACCOUNTANTS

## Communication with Those Charged with Governance

### To the Board of Directors South Central Wastewater Authority

We have audited the financial statements of the business-type activities of South Central Wastewater Authority for the year ended June 30, 2017. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards and *Government Auditing Standards*, as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated July 12, 2017. Professional standards also require that we communicate to you the following information related to our audit.

### Significant Audit Findings

#### *Qualitative Aspects of Accounting Practices*

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Authority are described in Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2017. We noted no transactions entered into by the entity during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimate affecting the Authority's financial statements was:

Management's estimate of the useful lives of depreciable assets is based on industry standards. We evaluated the key factors and assumptions used to develop the depreciation expense in determining that it is reasonable in relation to the financial statements taken as a whole.

The financial statement disclosures are neutral, consistent, and clear.

#### *Difficulties Encountered in Performing the Audit*

We encountered no significant difficulties in dealing with management in performing and completing our audit.

#### *Corrected and Uncorrected Misstatements*

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Management has corrected all such misstatements. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to each opinion unit's financial statements taken as a whole.

### *Disagreements with Management*

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditors' report. We are pleased to report that no such disagreements arose during the course of our audit.

### *Management Representations*

We have requested certain representations from management that are included in the management representation letter dated September 26, 2017.

### *Management Consultations with Other Independent Accountants*

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the entity's financial statements or a determination of the type of auditors' opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

### *Other Audit Findings or Issues*

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the entity's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

### Other Matters

We applied certain limited procedures to management's discussion and analysis and the schedules related to pension and OPEB funding, which are required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

### Restriction on Use

This information is intended solely for the use of the Board of Directors and management of the South Central Wastewater Authority and is not intended to be, and should not be, used by anyone other than these specified parties.

*Robinson, Farmer, Cox Associates*

Charlottesville, Virginia  
September 26, 2017

# **South Central Wastewater Authority**



## **Financial Statements Year Ended June 30, 2017**

# **SOUTH CENTRAL WASTEWATER AUTHORITY**

## **Petersburg, Virginia**

(A Public Body Politic and Corporation Chartered July, 1996)

### **- Board of Directors -**

Percy C. Ashcraft, Chairman  
*Prince George County*

William E. Henley, P.E., Vice-Chairman  
*City of Colonial Heights*

George B. Hayes, P.E., Secretary-Treasurer  
*Chesterfield County*

Robert B. Wilson, Member  
*Dinwiddie County Water Authority*

Tom Tyrrell, Member  
*City of Petersburg*

### **- Officials -**

Dr. Robert C. Wichser, P.E., BCCE, Executive Director

James C. Gordon, Assistant Executive Director

McGuire Woods, Counsel

## Table of Contents

	Page
Independent Auditors' Report .....	1-2
Management's Discussion and Analysis.....	3-7
<b>Financial Statements:</b>	
Statement of Net Position .....	8-9
Statement of Revenues, Expenses and Changes in Net Position .....	10
Statement of Cash Flows.....	11
Notes to Financial Statements .....	12-37
<b>Required Supplementary Information:</b>	
Schedule of Changes in Net Pension (Asset) Liability and Related Ratios .....	38
Schedule of Employer Contributions.....	39
Notes to Required Supplementary Information .....	40
Schedule of OPEB Funding Progress.....	41
<b>Compliance:</b>	
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 <i>Government Auditing Standards</i> .....	42-43

# ROBINSON, FARMER, COX ASSOCIATES

CERTIFIED PUBLIC ACCOUNTANTS

A PROFESSIONAL LIMITED LIABILITY COMPANY

## Independent Auditors' Report

**To the Honorable Board of Directors  
South Central Wastewater Authority  
Petersburg, Virginia**

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

We have audited the accompanying financial statements of the business-type activities of South Central Wastewater Authority, as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the South Central Wastewater Authority's basic financial statements as listed in the table of contents.

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

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

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

Our responsibility is to express 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; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia. 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.



## ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of South Central Wastewater Authority, as of June 30, 2017, and the changes in financial position, and cash flows thereof for the 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 and schedules related to pension and OPEB funding on pages 3-7 and 38-41 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

## **Report on Summarized Comparative Information**

Other auditors have previously audited South Central Wastewater Authority's 2016 financial statements, and expressed an unmodified audit opinion on those audited financial statements in their report dated November 9, 2016. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2016, is consistent, in all material respects, with the audited financial statements from which it has been derived.

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

In accordance with *Government Auditing Standards*, we have also issued our report dated September 26, 2017, on our consideration of South Central Wastewater 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 to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering South Central Wastewater Authority's internal control over financial reporting and compliance.



Charlottesville, Virginia  
September 26, 2017

## Management's Discussion and Analysis

As management of the South Central Wastewater Authority (Authority), we offer readers of the South Central Wastewater Authority's financial statements this narrative overview and analysis of the financial activities of South Central Wastewater Authority for the fiscal year ended June 30, 2017.

### Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the Authority's basic financial statements. Since the Authority is engaged only in business-type activities, its basic financial statements are comprised of only two components: 1) enterprise fund financial statements and 2) notes to the financial statements. This report also contains required supplementary information in addition to the basic financial statements themselves.

**Enterprise fund financial statements.** The enterprise fund financial statements are designed to provide readers with a broad overview of the Authority's finances, in a manner similar to a private-sector business.

The statement of net position presents information on the Authority's assets, deferred outflows of resources, deferred inflows of resources and liabilities. Equity of the Authority is reported as net position. Net position is the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources. Net investment in capital assets represents capital assets, reduced by accumulated depreciation and by any outstanding debt, deferred outflows of resources and deferred inflows of resources related to the acquisition, construction or improvement of those assets. Restricted net position represents restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating.

The statement of revenues, expenses and changes in net position presents information showing how the Authority's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of the cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods, (e.g. earned but unused vacation leave).

Refer to the table of contents for the basic enterprise fund financial statements.

**Notes to financial statements.** The notes provide additional information that is essential to a full understanding of the data provided in the financial statements. Refer to the table of contents for the notes to the financial statements. Required supplementary information presents the Authority's progress in funding its obligation to provide pension benefits to its employees.

### **Summary of South Central Wastewater Authority Operations**

The South Central Wastewater Authority (SCWWA) staff includes thirty-four (34) full-time employees and contributes to the salaries of the Executive Director, Assistant Executive Director, Office/Business Manager, Laboratory Manager, Maintenance Manager, Chief of Maintenance, and Painter/Carpenter who are shared employees with the Appomattox River Water Authority. The Authority operates a 23 million gallon per day (mgd) wastewater treatment plant located on Pocahontas Island in the City of Petersburg. The Authority treats flow from the cities of Colonial Heights and Petersburg as well as portions of Chesterfield, Dinwiddie, and Prince George counties. Wastewater from the cities is pumped directly to the Authority through five (5) pumping stations. Wastewater from the counties is conveyed through the collection systems of the cities by conveyance agreements executed in 1996.

	2017	2016
Total Annual Flow (mg)	4101	4867
Minimum Day (mgd)	8.293 (Sept. 2016)	8.495 (Sept. 2015)
Maximum Day (mgd)	36.437 (Oct. 2016)	36.658 (Dec. 2015)
Annual Average Day (mgd)	11.6957	13.322



## **Financial Highlights**

- The assets and deferred outflows of resources of the Authority exceeded its liabilities at the close of the most recent fiscal year by \$26,974,949 (net position). Of this amount \$8,719,614 is reported as unrestricted net position.
- The Authority's total net position increased by \$3,614,152.
- The Authority's total long-term debt which includes net OPEB obligation, net pension liability and compensated absences increased \$17,017 during the current fiscal year. The Authority's investment in capital assets increased during the year by \$68,044 after recording depreciation expense of \$976,942. Details of these items can be found under the heading "*Capital Asset and Debt Administration*".
- Total revenues increased \$1.0 million after recording refunds to Member localities of \$727,455. Total expenses decreased \$227,979.

## **Financial Analysis**

As noted earlier, net position may serve over time as a useful indicator of an Authority's financial position. In the case of the Authority, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$26,974,949 at the close of the most recent fiscal year.

By far the largest portion of the Authority's net position (68 percent) reflects its net investment in capital assets. The Authority uses these capital assets to provide services to its customers; consequently, these assets are not available for future spending.

The following table provides a summary of the statement of net position.

		<b>Net Position</b>	
		<b>2017</b>	<b>2016</b>
Current and other assets	\$	10,450,013	\$ 6,811,388
Capital assets		18,255,335	18,187,291
Total assets	\$	28,705,348	\$ 24,998,679
Net difference of actual and expected pension asset earnings	\$	91,555	\$ -
Post measurement date employer pension contributions		113,903	136,390
Total deferred outflows	\$	205,458	\$ 136,390
Long-term liabilities	\$	783,274	\$ 766,257
Other liabilities		960,582	842,739
Total liabilities	\$	1,743,856	\$ 1,608,996
Differences between expected and actual experience	\$	192,001	\$ 165,276
Total deferred inflows	\$	192,001	\$ 165,276
Net investment in capital assets	\$	18,255,335	\$ 18,187,291
Unrestricted		8,719,614	5,173,506
Total net position	\$	26,974,949	\$ 23,360,797

## **Financial Analysis: (continued)**

At the end of the current fiscal year, the Authority is able to report positive balances in all categories of net position.

	<b>Change in Net Position</b>	
	<b>2017</b>	<b>2016</b>
Revenues:		
Operating revenues	\$ 8,355,884	\$ 7,226,433
Gain (loss) on disposal of capital assets	-	10,500
Other nonoperating revenue	1,111,597	1,486,165
Investment income	268,843	-
Total revenues	<u>\$ 9,736,324</u>	<u>\$ 8,723,098</u>
Expenses:		
Operating expenses (excluding depreciation)	\$ 5,145,230	\$ 5,388,192
Depreciation expense	976,942	961,959
Total expenses	<u>\$ 6,122,172</u>	<u>\$ 6,350,151</u>
Increase (decrease) in net position	\$ 3,614,152	\$ 2,372,947
Net position-July 1	<u>23,360,797</u>	<u>20,987,850</u>
Net position-June 30	<u><u>\$ 26,974,949</u></u>	<u><u>\$ 23,360,797</u></u>

The Authority's net position increased by \$3,614,152 during the current year. Key elements of the changes in revenues and expenses are explained in greater detail under the Review of Operations section.

## **Capital Asset and Debt Administration**

Capital Assets - The Authority's investment in capital assets as of June 30, 2017 amounts to \$18,255,335 (net of accumulated depreciation). Investment in capital assets increased by approximately 0.37% during the year. Below is a comparison of the items that make up capital assets as of June 30, 2017 with that of June 30, 2016.

	<b>2017</b>	<b>2016</b>
Land	\$ 92,968	\$ 92,968
Water systems	33,352,033	32,417,992
Equipment	7,408,956	7,319,642
Hydro costs incurred	2,974,264	2,835,763
Accumulated depreciation	(27,480,848)	(26,503,909)
Construction in progress	<u>1,907,962</u>	<u>2,024,835</u>
Total capital assets	<u><u>\$ 18,255,335</u></u>	<u><u>\$ 18,187,291</u></u>

More detailed information on the Authority's capital assets is presented in Note 4 of the notes to the financial statements.

Long-Term Debt - At the end of the current fiscal year, the Authority's long-term debt included net OPEB obligation, net pension liability and compensated absences. Total long-term debt increased \$17,017 including an increase in the OPEB obligation and compensated absences. The net pension liability decreased \$31,357.

More detailed information on the Authority's long-term obligations is presented in Notes 5, 6 and 7 of the notes to the financial statements.

## **Review of Operations**

As previously mentioned total revenues increased including operating revenues which increased by \$1.1 million resulting from a significant increase in septage revenue received. Operating expenses (excluding depreciation) decreased \$242,962 over fiscal year 2017 totals.

## **Authority Highlights**

- The treatment facility discharge effluent quality met all VPDES permit limits during the fiscal year and no significant problems were encountered with operating the plant.
- The average flow for fiscal year 2017 was 1.6263 mgd less than for fiscal year 2016. Rainfall in fiscal year 2017 (40.31 inches) was lower than in fiscal year 2016 (49.68 inches). Fiscal year 2017 was fairly dry at the treatment plant's rain gauge with the maximum facility flow occurring on October 9, 2016 following a significant rain event. The treatment plant recorded 3.65 inches of rain on October 8, 2016.
- Authority staff developed and implemented private exchanges of nutrient credits for the 2017 compliance year through a contract with Chesterfield County and established contracts for 2018, 2019, and 2020 through Chesterfield County. These credits cost less than credits purchased through the Virginia Nutrient Credit Exchange Association and provide Chesterfield County (who has excess nutrient credits to sell at this time) more revenue than they would have received through the Virginia Nutrient Credit Exchange Association.

The Authority is also maintaining an active watch on regulatory issues such as the potential for point source nutrient waste-load changes in the James River Estuary. The following provides more detail.

### **Nutrients**

The Virginia Department of Environmental Quality (DEQ) finalized regulations establishing reduced limits for nitrogen and phosphorus discharges into the Chesapeake Bay and its tributaries in November 2005. The allocations for the Authority adopted by the Virginia State Water Control Board are based on concentrations of 5 milligrams per liter of total nitrogen and 0.5 milligrams per liter of total phosphorus.

In December 2010, U.S. EPA finalized the Chesapeake Bay Total Maximum Daily Load (TMDL). This is a Bay-wide program that could result in further reductions to wastewater treatment facility allocations of nutrients. The individual states in the Bay watershed will be responsible for compliance with these mandates from the U.S. EPA. One of the requirements of the TMDL is that each state submits Watershed Implementation Plans (WIP's) detailing how they intend to meet the nutrient load caps imposed by U.S. EPA. States including Virginia, who also developed two-year milestone reports and is submitting these bi-annual progress reports to U.S. EPA showing what progress had been made.

Facilities within the James River watershed are facing the possibility of additional annual nutrient waste-load reductions. One of the issues raised during the TMDL was the harmful algae blooms in the middle segment of the James River. The end result was that DEQ adopted the task of conducting a detailed and scientifically acceptable study on algae chlorophyll within the middle segment of the James River to determine if further reductions to nutrient loads within the James River basin are necessary to prevent and control harmful algae blooms. Any potential reductions to nutrient allocations will not be known until 2021. Such consequences may include reductions to wastewater plant nutrient allocations to be based on current actual flows rather than design flows. Such reductions would have a significant impact on wastewater plants discharging into the James River, including SCWWA.

## **Authority Highlights: (continued)**

### **Nutrients: (continued)**

The SCWWA Board of Directors elected to defer a nutrient reduction upgrade project at this time and instead purchase nutrient credits. In February 2012, the Board gave indication that constructing a nutrient reduction project would probably not be approved by their various governing bodies until the cost of debt service was less than the purchase of nutrient credits. Given current project cost estimates and credit costs, this is expected to take place no earlier than 2022. It is possible, however, that regulatory drivers that would eliminate surplus credits available (such as a reduction in middle James River point-source allocations or localities using excess nutrient credits to offset non-point loads) would require the project be on-line by 2022 or perhaps even earlier.

### **Wet Weather Infiltration & Inflow (I&I)**

The wastewater facility biological treatment process is very vulnerable to upsets due to high influent flows during wet-weather events. The base design of the SCWWA plant allows for a peak day flow of 57.5 MGD (2.5 times average) and a peak hour flow of 69.0 MGD (3.0 times average). The Authority does not own the wastewater collection systems transporting the influent to the SCWWA facility. From the regulatory perspective, there is the potential that the contributing jurisdictions will be responsible for finding and eliminating I & I sources in their collection systems. The jurisdictions may also need to consider constructing and operating flow equalization facilities to mitigate the I & I that is not practicable to eliminate to prevent surges to the Authority treatment plant. The City of Petersburg has installed a wastewater equalization (holding) basin at their Poor Creek Pump Station to mitigate peak flows from this sewer-shed. In recent years, the Authority has begun noting compliance actions have occurred in Virginia against facilities/jurisdictions with flows in the range of 10 to 100 MGD that have noted sewer system overflows in the collection system.

### ***Biosolids Handling***

South Central Wastewater Authority utilizes land application for disposal of generated biosolids. Revised Virginia biosolids regulations were approved by the Virginia State Water Control Board in September 2011 and while not all aspects of the regulatory changes were favorable, the regulations do not constitute any significant additional regulatory burden for South Central's biosolids land application program. The Authority presently has an agreement with the Hopewell Regional Wastewater Facility (HRWWF) for back-up incineration of SCWWA biosolids at the HRWWF should the need arise. As of June 30, 2017, SCWWA had not encountered the need to send biosolids to HRWWF for disposal by incineration.

### **Economic Conditions**

The Authority continues to operate under sound management current working capital and positive cash flows from operations and an outside revenue stream. Overall finances for the Authority for fiscal year 2017 as viewed by management, including the Board of Directors, is considered sound.

### **Contacting the Authority**

Questions concerning this report or requests for additional information should be directed to the Executive Director, 21300 Chesdin Road, S. Chesterfield, Virginia 23803, telephone (804) 590-1145.

**- Financial Statements -**

**SOUTH CENTRAL WASTEWATER AUTHORITY**

Petersburg, Virginia

## Statement of Net Position

June 30, 2017

(With Comparative Totals for the Prior Year)

	<u>2017</u>	<u>2016</u>
<b>Assets</b>		
<b>Current Assets</b>		
Cash and cash equivalents	\$ 4,520,807	\$ 3,807,791
Cash and cash equivalents - Board designated	4,473,396	2,027,965
Accounts receivable	799,729	436,968
Inventory	<u>656,081</u>	<u>538,664</u>
Total Current Assets	\$ <u>10,450,013</u>	\$ <u>6,811,388</u>
<b>Noncurrent Assets</b>		
Capital Assets:		
Land and land rights	\$ 92,968	\$ 92,968
Sewer system	33,352,033	32,417,992
Plant machinery	7,408,956	7,319,642
Equipment and vehicles	2,974,264	2,835,763
Accumulated depreciation	<u>(27,480,848)</u>	<u>(26,503,909)</u>
Sub-total net capital assets	\$ 16,347,373	\$ 16,162,456
Construction in progress	<u>1,907,962</u>	<u>2,024,835</u>
Total net capital assets	\$ <u>18,255,335</u>	\$ <u>18,187,291</u>
Total Noncurrent Assets	\$ <u>18,255,335</u>	\$ <u>18,187,291</u>
Total Assets	\$ <u>28,705,348</u>	\$ <u>24,998,679</u>
<b>Deferred Outflows of Resources</b>		
Net difference between projected and actual earnings on pension plan investments	\$ 91,555	\$ -
Post measurement date employer pension contributions	<u>113,903</u>	<u>136,390</u>
Total Deferred Outflows of Resources	\$ <u>205,458</u>	\$ <u>136,390</u>

**SOUTH CENTRAL WASTEWATER AUTHORITY**

Petersburg, Virginia

## Statement of Net Position

June 30, 2017 (continued)

(With Comparative Totals for the Prior Year)

	<u>2017</u>	<u>2016</u>
<b>Liabilities</b>		
<b>Current Liabilities Payable from Current Assets:</b>		
Accounts payable and other accrued expenses	\$ 233,127	\$ 350,869
Refunds due to member localities	<u>727,455</u>	<u>491,870</u>
Total Current Liabilities Payable from Current Assets	<u>\$ 960,582</u>	<u>\$ 842,739</u>
<b>Noncurrent Liabilities</b>		
Net OPEB obligation	\$ 71,800	\$ 59,700
Net pension liability	495,295	526,652
Compensated absences	<u>216,179</u>	<u>179,905</u>
Total Noncurrent Liabilities	<u>\$ 783,274</u>	<u>\$ 766,257</u>
Total Liabilities	<u>\$ 1,743,856</u>	<u>\$ 1,608,996</u>
<b>Deferred Inflow of Resources</b>		
Differences between expected and actual experience	\$ <u>192,001</u>	\$ <u>165,276</u>
Total Deferred Inflows of Resources	<u>\$ 192,001</u>	<u>\$ 165,276</u>
<b>Net Position</b>		
Investment in capital assets	\$ 18,255,335	\$ 18,187,291
Unrestricted	<u>8,719,614</u>	<u>5,173,506</u>
Total Net Position	<u><u>\$ 26,974,949</u></u>	<u><u>\$ 23,360,797</u></u>

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

**SOUTH CENTRAL WASTEWATER AUTHORITY**

Petersburg, Virginia

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

Year Ended June 30, 2017

(With Comparative Totals for the Prior Year)

	<u>2017</u>	<u>2016</u>
<b>Operating Revenues</b>		
Charges for services	\$ 6,371,445	\$ 6,421,058
Septage and miscellaneous	<u>1,984,439</u>	<u>805,375</u>
Total Operating Revenues	<u>\$ 8,355,884</u>	<u>\$ 7,226,433</u>
<b>Operating Expenses</b>		
Operating and maintenance		
Salaries	\$ 1,610,725	\$ 1,556,033
Employee benefits	549,351	607,437
Contractual services	433,718	486,487
Chemicals	534,767	519,798
Materials and supplies	340,305	311,562
Sludge disposal	297,751	289,544
Other charges	548,961	969,460
Small equipment replacement	-	82,997
Nutrient credit purchases	829,652	564,874
Depreciation	<u>976,942</u>	<u>961,959</u>
Total Operating Expenses	<u>\$ 6,122,172</u>	<u>\$ 6,350,151</u>
Net Operating Income (Loss)	<u>\$ 2,233,712</u>	<u>\$ 876,282</u>
<b>Nonoperating Revenues (Expenses)</b>		
Contributions from member localities:		
Equipment repair and replacement	\$ 426,495	\$ 577,514
Operations and maintenance reserves	676,801	488,086
Interest income	268,843	-
Other revenue	8,301	29,700
Sale of nutrient credits	-	390,865
Gain on sale of equipment	<u>-</u>	<u>10,500</u>
Total Nonoperating Revenues (Expenses)	<u>\$ 1,380,440</u>	<u>\$ 1,496,665</u>
Change in net position	\$ 3,614,152	\$ 2,372,947
Net position, beginning of year	<u>23,360,797</u>	<u>20,987,850</u>
Net position, end of year	<u><u>\$ 26,974,949</u></u>	<u><u>\$ 23,360,797</u></u>

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



**SOUTH CENTRAL WASTEWATER AUTHORITY**  
Petersburg, Virginia

Statement of Cash Flows  
Year Ended June 30, 2017  
(With Comparative Totals for the Prior Year)

	<u>2017</u>	<u>2016</u>
<b>Cash flows from operating activities:</b>		
Receipts from customers and users	\$ 8,228,706	\$ 7,895,558
Payments to suppliers and vendors	(3,196,676)	(2,917,904)
Payments to and on behalf of employees	(2,185,402)	(2,207,896)
Net cash provided by (used for) operating activities	<u>\$ 2,846,628</u>	<u>\$ 2,769,758</u>
<b>Cash flows from capital and related financing activities:</b>		
Intergovernmental revenue - equipment replacement	\$ 426,495	\$ 577,514
Acquisition of plant and equipment	(1,068,621)	(1,364,027)
Proceeds from sale of equipment	-	10,500
Net cash provided by (used for) capital and related financing activities	<u>\$ (642,126)</u>	<u>\$ (776,013)</u>
<b>Cash flows from noncapital financing activities:</b>		
Intergovernmental revenue - operation and maintenance reserves	\$ 676,801	\$ 488,086
Sale of nutrient credits	-	390,865
Other revenue	8,301	29,700
Net cash provided by (used for) noncapital financing activities	<u>\$ 685,102</u>	<u>\$ 908,651</u>
<b>Cash flows from investing activities:</b>		
Interest received	\$ 268,843	\$ -
Net cash provided by (used for) investing activities	<u>\$ 268,843</u>	<u>\$ -</u>
Net increase (decrease) in cash and cash equivalents	<u>\$ 3,158,447</u>	<u>\$ 2,902,396</u>
Cash and cash equivalents at beginning of year	<u>\$ 5,835,756</u>	<u>\$ 2,933,360</u>
Cash and cash equivalents at end of year	<u><u>\$ 8,994,203</u></u>	<u><u>\$ 5,835,756</u></u>
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:		
Operating income (loss)	\$ 2,233,712	\$ 876,282
Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities:		
Depreciation	976,942	961,959
Changes in operating assets and liabilities:		
(Increase) decrease in receivables	(362,763)	354,520
(Increase) decrease in inventories	(117,417)	102,421
Increase (decrease) in operating accounts payable	(94,105)	140,269
Increase (decrease) in refunds due member localities	235,585	378,733
Increase (decrease) in compensated absences	36,274	23,072
(Increase) decrease in net pension liability	(31,357)	(71,998)
(Increase) decrease in pension deferred outflow of resources	(69,068)	-
Increase (decrease) in pension deferred inflow of resources	26,725	-
Increase (decrease) in OPEB obligation	12,100	4,500
Net cash provided by (used for) operating activities	<u><u>\$ 2,846,628</u></u>	<u><u>\$ 2,769,758</u></u>

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

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017

---

### **NOTE 1 – ORGANIZATION AND NATURE OF BUSINESS:**

The South Central Wastewater Authority (Authority) is a public body organized under the provisions of the Virginia Water and Sewer Authorities Act, by the governing bodies of the City of Petersburg, Virginia, the City of Colonial Heights, Virginia, and the Counties of Chesterfield, Dinwiddie, and Prince George, Virginia. The purpose of the Authority is to operate and maintain wastewater treatment and related facilities for the members of the Authority.

### **NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:**

#### **A. Financial Reporting Entity**

The Authority's governing body is comprised of one member appointed by each of the five participating jurisdictions. These governmental entities have an ongoing financial responsibility to the Authority because its continued existence depends on continued funding by the participants. The Authority is a legally separate entity from the participating governments and no participating government has access to its resources or surpluses, nor is any participant liable for the Authority's debts or deficits. The Authority also has the ability to finance its capital projects through user charges or the sale of revenue bonds.

The Authority has been determined to be a joint venture of the five participating jurisdictions. The Authority is not a component unit of any of the participating governments. There are no component units to be included in the Authority's financial statements.

#### **B. Basis of Accounting**

South Central Wastewater Authority operates as an enterprise fund, uses the flow of economic resources measurement focus and its accounts are maintained on the accrual basis of accounting. Under this method, revenues are recognized when earned, and expenses are recorded as liabilities when incurred, without regard to receipt or payment of cash. The Authority accrues revenue for services rendered but not yet billed at the end of the fiscal year. The Authority follows Governmental Accounting Standards Board (GASB) pronouncements.

The Authority distinguishes *operating* revenues and expenses from *nonoperating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Authority's principal ongoing operations. The principal operating revenues of the Authority are charges to customers for sales and services. Operating expenses include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Governmental Accounting Standards Board (GASB) Statement No. 34, *Basic Financial Statements and Management's Discussion and Analysis for State and Local Governments* requires the financial statements to include a Management's Discussion and Analysis (MD&A) section providing an analysis of the Authority's overall financial position and results of operations.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)**

#### **C. Basic Financial Statements**

Since the Authority is only engaged in business-type activities, it is required to present only the financial statements required for enterprise funds. For the Authority, the basic financial statements and required supplementary information consist of:

- Management’s Discussion and Analysis
- Enterprise Fund Financial Statements
  - Statement of Net Position
  - Statement of Revenues, Expenses and Changes in Net Position
  - Statement of Cash Flows
  - Notes to Financial Statements
- Schedule of Changes in Net Pension (Asset) Liability and Related Ratios
- Schedule of Employer Contributions
- Notes to Required Supplementary Information
- Schedule of OPEB Funding Progress

#### **D. Cash and Cash Equivalents and Restricted Cash and Cash Equivalents**

Cash and cash equivalents and restricted cash and cash equivalents include amounts in demand deposits as well as short-term investments, stated at cost which approximates fair value, with original maturity dates within three months of the dates acquired by the Authority.

#### **E. Accounts Receivable**

Accounts receivable is recorded at face value. Since substantially all of the Authority’s receivables are from the participating jurisdictions, no allowance for uncollectible accounts is deemed necessary.

#### **F. Inventories**

Inventories are valued at cost using the first-in, first-out method. Inventories consist of expendable supplies held for consumption and are recorded as expenses when used (consumption method).

#### **G. Capital Assets**

Capital assets, which include property, plant, equipment, and infrastructure assets (e.g., roads, bridges, sidewalks, and similar items), are reported in the financial statements. Capital assets are defined by the Authority as assets with an initial, individual cost of more than \$5,000 (amount not rounded) and an estimated useful life in excess of one year. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets are recorded at acquisition value at the date of donation.

The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend the asset’s life are not capitalized.

Major outlays for capital assets and improvements are capitalized as projects are constructed. Interest incurred during the construction phase of capital assets of business-type activities is included as part of the capitalized value of the assets constructed. No interest was capitalized during the current or previous fiscal year.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)**

#### **G. Capital Assets: (Continued)**

Property, plant, equipment and infrastructure is depreciated using the straight-line method over the following estimated useful lives:

Sewer system and plant	40 years
Plant machinery	15 years
Equipment and vehicles	5 years

#### **H. Compensated Absences**

Authority employees are granted vacation and sick leave in varying amounts. In the event of termination other than retirement, Authority employees are paid for accumulated vacation days based on years of service and are not paid for accumulated sick leave. Upon retirement, Authority employees are paid for accumulated vacation days and a portion of accumulated sick leave. The unused vested portion of vacation and sick leave is recorded as a liability at year end.

#### **I. Use of Estimates**

The preparation of financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses and disclosure of contingent assets and liabilities for the reported periods. Actual results could differ from those estimates and assumptions.

#### **J. Net Position**

Net position is the difference between a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources. Net investment in capital assets represents capital assets, less accumulated depreciation, less any outstanding debt related to the acquisition, construction or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt are also included in this component of net position.

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

In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then. Certain items related to the measurement of the net pension asset are reported as deferred inflows of resources. These items include the net difference between projected and actual earnings on pension plan investments. In addition, contributions to the pension plan made during the current year and subsequent to the net pension asset measurement date, which will be recognized as an increase of the net pension asset next fiscal year are included. For more detailed information on these items, reference the pension note.

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. Certain items related to the measurement of the net pension asset are reported as deferred inflows of resources. This includes differences between expected and actual experience. For more detailed information on these items, reference the pension note.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES: (CONTINUED)**

#### **L. Prepaid Expenses**

Certain payments to vendors represent costs applicable to future accounting periods and are recorded as prepaid items in both the government-wide and fund financial statements. The cost of prepaid items is recorded as expenditures/expenses when consumed rather than when purchased.

#### **M. Pensions**

For purposes of measuring the net pension asset, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Authority's Retirement Plan and the additions to/deductions from the Authority's Retirement Plan's net fiduciary position have been determined on the same basis as they were reported by the Virginia Retirement System (VRS). For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

#### **N. Net Position Flow Assumption**

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

#### **O. Financial Statement Presentation**

Certain amounts in the financial statements of the prior fiscal year have been reclassified to conform to the current financial statement presentation.

### **NOTE 3 – DEPOSITS AND INVESTMENTS:**

#### **Deposits**

Deposits with banks are covered by the Federal Deposit Insurance Corporation (FDIC) and collateralized in accordance with the Virginia Security for Public Deposits Act (the "Act") Section 2.2-4400 et. seq. of the Code of Virginia. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial Institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in the amounts from 50% to 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

#### **Investments**

Statutes authorize the Authority to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper and certain corporate notes, banker's acceptances, repurchase agreements and the State Treasurer's Local Government Investment Pool (LGIP).

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 3 – DEPOSITS AND INVESTMENTS: (CONTINUED)**

#### **Concentration of credit risk**

The Policy establishes limitations on portfolio composition by issuer in order to control concentration of credit risk. No more than 5% of the Authority's portfolio will be invested in the securities of any one issuer with the exception of: (1) the U.S. government or agencies thereof, (2) fully insured/collateralized certificates of deposit or repurchase agreements that are collateralized by the U.S. government or agencies thereof, and (3) mutual funds whereby the portfolio is limited to U.S. government or agency securities.

As of June 30, 2017, the Authority held no investments.

### **NOTE 4 – CAPITAL ASSETS:**

A summary of the Authority's capital assets and the changes therein for the year ended June 30, 2017, follows:

	<b><u>Beginning Balance</u></b>	<b><u>Increases</u></b>	<b><u>Decreases</u></b>	<b><u>Ending Balance</u></b>
Capital assets not being depreciated:				
Land and land rights	\$ 92,968	\$ -	\$ -	\$ 92,968
Construction in progress	2,024,835	945,341	1,062,214	1,907,962
Total capital assets not being depreciated	<u>\$ 2,117,803</u>	<u>\$ 945,341</u>	<u>\$ 1,062,214</u>	<u>\$ 2,000,930</u>
Other capital assets, being depreciated:				
Sewer system	\$ 32,417,992	\$ 934,041	\$ -	\$ 33,352,033
Plant machinery	7,319,642	89,314	-	7,408,956
Equipment and vehicles	2,835,763	138,502	-	2,974,265
Total other capital assets being depreciated	<u>\$ 42,573,397</u>	<u>\$ 1,161,857</u>	<u>\$ -</u>	<u>\$ 43,735,254</u>
Accumulated depreciation:				
Sewer system	\$ (18,334,837)	\$ (702,342)	\$ -	\$ (19,037,179)
Plant machinery	(5,919,908)	(156,121)	-	(6,076,029)
Equipment and vehicles	(2,249,162)	(118,479)	-	(2,367,641)
Total accumulated depreciation	<u>\$ (26,503,907)</u>	<u>\$ (976,942)</u>	<u>\$ -</u>	<u>\$ (27,480,849)</u>
Other capital assets being depreciated, net	<u>\$ 16,069,490</u>	<u>\$ 184,915</u>	<u>\$ -</u>	<u>\$ 16,254,405</u>
Capital assets, net	<u>\$ 18,187,293</u>	<u>\$ 1,130,256</u>	<u>\$ 1,062,214</u>	<u>\$ 18,255,335</u>

Depreciation expense for the fiscal year totaled \$976,942.



## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

### **NOTE 5 – PENSION PLAN:**

#### ***Plan Description***

All full-time, salaried permanent employees of the Authority are automatically covered by a VRS Retirement Plan upon employment. This is an agent multiple-employer plan administered by the Virginia Retirement System (the System) along with plans for other employer groups in the Commonwealth of Virginia. Members earn one month of service credit for each month they are employed and for which they and their employer pay contributions to VRS. Members are eligible to purchase prior service, based on specific criteria as defined in the Code of Virginia, as amended. Eligible prior service that may be purchased includes prior public service, active military service, certain periods of leave, and previously refunded service.

The System administers three different benefit structures for covered employees – Plan 1, Plan 2, and, Hybrid. Each of these benefit structures has different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are set out in the table below:

RETIREMENT PLAN PROVISIONS		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p><b>About Plan 1</b> Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.</p>	<p><b>About Plan 2</b> Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.</p>	<p><b>About the Hybrid Retirement Plan</b> The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. (see "Eligible Members")</p> <ul style="list-style-type: none"><li>• The defined benefit is based on a member's age, creditable service and average final compensation at retirement using a formula.</li><li>• The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions.</li></ul>

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<p><b>About Plan 1 (Cont.)</b></p>	<p><b>About Plan 2 (Cont.)</b></p>	<p><b>About the Hybrid Retirement Plan (Cont.)</b></p> <ul style="list-style-type: none"> <li>• In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.</li> </ul>
<p><b>Eligible Members</b> Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.</p> <p><b>Hybrid Opt-In Election</b> VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.</p> <p>The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014.</p> <p>If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.</p>	<p><b>Eligible Members</b> Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.</p> <p><b>Hybrid Opt-In Election</b> Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.</p> <p>The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014.</p> <p>If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.</p>	<p><b>Eligible Members</b> Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:</p> <ul style="list-style-type: none"> <li>• Political subdivision employees*</li> <li>• Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014.</li> </ul> <p><b>*Non-Eligible Members</b> Some employees are not eligible to participate in the Hybrid Retirement Plan. They include:</p> <ul style="list-style-type: none"> <li>• Political subdivision employees who are covered by enhanced benefits for hazardous duty employees.</li> </ul>



# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<p><b>Hybrid Opt-In Election (Cont.)</b> Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.</p>	<p><b>Hybrid Opt-In Election (Cont.)</b> Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.</p>	<p><b>*Non-Eligible Members (Cont.)</b> Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.</p>
<p><b>Retirement Contributions</b> Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Some political subdivisions elected to phase in the required 5% member contribution but all employees are paying the full 5% as of July 1, 2016. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.</p>	<p><b>Retirement Contributions</b> Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Some political subdivisions elected to phase in the required 5% member contribution but all employees are paying the full 5% as of July 1, 2016.</p>	<p><b>Retirement Contributions</b> A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.</p>

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<p><b>Creditable Service</b> Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.</p>	<p><b>Creditable Service</b> Same as Plan 1.</p>	<p><b>Creditable Service</b> <b><u>Defined Benefit Component:</u></b> Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.</p> <p><b><u>Defined Contributions Component:</u></b> Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.</p>

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<p><b>Vesting</b> Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.</p> <p>Members are always 100% vested in the contributions that they make.</p>	<p><b>Vesting</b> Same as Plan 1.</p>	<p><b>Vesting</b> <b><u>Defined Benefit Component:</u></b> Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service. Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.</p> <p><b><u>Defined Contributions Component:</u></b> Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan.</p> <p>Members are always 100% vested in the contributions that they make.</p>

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<b>Vesting (Cont.)</b>	<b>Vesting (Cont.)</b>	<b>Vesting (Cont.)</b> <u><b>Defined Contributions Component: (Cont.)</b></u> Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. <ul style="list-style-type: none"> <li>• After two years, a member is 50% vested and may withdraw 50% of employer contributions.</li> <li>• After three years, a member is 75% vested and may withdraw 75% of employer contributions.</li> <li>• After four or more years, a member is 100% vested and may withdraw 100% of employer contributions.</li> </ul> Distribution is not required by law until age 70½.
<b>Calculating the Benefit</b> The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier and total service credit at retirement. It is one of the benefit payout options available to a member at retirement.	<b>Calculating the Benefit</b> See definition under Plan 1.	<b>Calculating the Benefit</b> <u><b>Defined Benefit Component:</b></u> See definition under Plan 1.

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## NOTE 5 – PENSION PLAN: (CONTINUED)

### Plan Description (continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	PLAN 2	HYBRID RETIREMENT PLAN
<p><b>Calculating the Benefit (Cont.)</b> An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.</p>	<p><b>Calculating the Benefit (Cont.)</b></p>	<p><b>Calculating the Benefit (Cont.)</b> <b><u>Defined Contribution Component:</u></b> The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.</p>
<p><b>Average Final Compensation</b> A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.</p>	<p><b>Average Final Compensation</b> A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.</p>	<p><b>Average Final Compensation</b> Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.</p>
<p><b>Service Retirement Multiplier</b> <b>VRS:</b> The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%.</p> <p><b>Sheriffs and regional jail superintendents:</b> The retirement multiplier for sheriffs and regional jail superintendents is 1.85%.</p> <p><b>Political subdivision hazardous duty employees:</b> The retirement multiplier of eligible political subdivision hazardous duty employees other than sheriffs and regional jail superintendents is 1.70% or 1.85% as elected by the employer.</p>	<p><b>Service Retirement Multiplier</b> <b>VRS:</b> Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013.</p> <p><b>Sheriffs and regional jail superintendents:</b> Same as Plan 1.</p> <p><b>Political subdivision hazardous duty employees:</b> Same as Plan 1.</p>	<p><b>Service Retirement Multiplier</b> <b><u>Defined Benefit Component:</u></b> <b>VRS:</b> The retirement multiplier for the defined benefit component is 1.00%.</p> <p>For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans.</p> <p><b>Sheriffs and regional jail superintendents:</b> Not applicable.</p> <p><b>Political subdivision hazardous duty employees:</b> Not applicable.</p> <p><b><u>Defined Contribution Component:</u></b> Not applicable.</p>

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<p><b>Normal Retirement Age</b> <b>VRS:</b> Age 65.</p> <p><b>Political subdivisions hazardous duty employees:</b> Age 60.</p>	<p><b>Normal Retirement Age</b> <b>VRS:</b> Normal Social Security retirement age.</p> <p><b>Political subdivisions hazardous duty employees:</b> Same as Plan 1.</p>	<p><b>Normal Retirement Age</b> <b><u>Defined Benefit Component:</u></b> <b>VRS:</b> Same as Plan 2.</p> <p><b>Political subdivisions hazardous duty employees:</b> Not applicable.</p> <p><b><u>Defined Contribution Component:</u></b> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>
<p><b>Earliest Unreduced Retirement Eligibility</b> <b>VRS:</b> Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service.</p> <p><b>Political subdivisions hazardous duty employees:</b> Age 60 with at least five years of creditable service or age 50 with at least 25 years of creditable service.</p>	<p><b>Earliest Unreduced Retirement Eligibility</b> <b>VRS:</b> Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90.</p> <p><b>Political subdivisions hazardous duty employees:</b> Same as Plan 1.</p>	<p><b>Earliest Unreduced Retirement Eligibility</b> <b><u>Defined Benefit Component:</u></b> <b>VRS:</b> Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90.</p> <p><b>Political subdivisions hazardous duty employees:</b> Not applicable.</p> <p><b><u>Defined Contribution Component:</u></b> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>
<p><b>Earliest Reduced Retirement Eligibility</b> <b>VRS:</b> Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.</p>	<p><b>Earliest Reduced Retirement Eligibility</b> <b>VRS:</b> Age 60 with at least five years (60 months) of creditable service.</p>	<p><b>Earliest Reduced Retirement Eligibility</b> <b><u>Defined Benefit Component:</u></b> <b>VRS:</b> Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.</p>

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<p><b>Earliest Reduced Retirement Eligibility (Cont.)</b></p> <p><b>Political subdivisions hazardous duty employees:</b> 50 with at least five years of creditable service.</p>	<p><b>Earliest Reduced Retirement Eligibility (Cont.)</b></p> <p><b>Political subdivisions hazardous duty employees:</b> Same as Plan 1.</p>	<p><b>Earliest Reduced Retirement Eligibility (Cont.)</b></p> <p><b>Political subdivisions hazardous duty employees:</b> Not applicable.</p> <p><b><u>Defined Contribution Component:</u></b> Members are eligible to receive distributions upon leaving employment, subject to restrictions.</p>
<p><b>Cost-of-Living Adjustment (COLA) in Retirement</b> The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%.</p> <p><b><u>Eligibility:</u></b> For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date.</p> <p>For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.</p>	<p><b>Cost-of-Living Adjustment (COLA) in Retirement</b> The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%.</p> <p><b><u>Eligibility:</u></b> Same as Plan 1.</p>	<p><b>Cost-of-Living Adjustment (COLA) in Retirement</b> <b><u>Defined Benefit Component:</u></b> Same as Plan 2.</p> <p><b><u>Defined Contribution Component:</u></b> Not applicable.</p> <p><b><u>Eligibility:</u></b> Same as Plan 1 and Plan 2.</p>

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<p><b>Cost-of-Living Adjustment (COLA) in Retirement (Cont.)</b></p> <p><b><u>Exceptions to COLA Effective Dates:</u></b> The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances:</p> <ul style="list-style-type: none"> <li>• The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013.</li> <li>• The member retires on disability.</li> <li>• The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP).</li> <li>• The member is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program.</li> <li>• The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.</li> </ul>	<p><b>Cost-of-Living Adjustment (COLA) in Retirement (Cont.)</b></p> <p><b><u>Exceptions to COLA Effective Dates:</u></b> Same as Plan 1.</p>	<p><b>Cost-of-Living Adjustment (COLA) in Retirement (Cont.)</b></p> <p><b><u>Exceptions to COLA Effective Dates:</u></b> Same as Plan 1 and Plan 2.</p>



## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

### **NOTE 5 – PENSION PLAN: (CONTINUED)**

#### ***Plan Description (continued)***

<b>RETIREMENT PLAN PROVISIONS (CONTINUED)</b>		
<b>PLAN 1</b>	<b>PLAN 2</b>	<b>HYBRID RETIREMENT PLAN</b>
<p><b>Disability Coverage</b> Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.</p> <p>VSDP members are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.</p>	<p><b>Disability Coverage</b> Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.</p> <p>VSDP members are subject to a one-year waiting period before becoming eligible for non-work related disability benefits.</p>	<p><b>Disability Coverage</b> Employees of political subdivisions (including Plan 1 and Plan2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides an employer-paid comparable program for its members.</p> <p>Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.</p>
<p><b>Purchase of Prior Service</b> Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. When buying service, members must purchase their most recent period of service first. Members also may be eligible to purchase periods of leave without pay.</p>	<p><b>Purchase of Prior Service</b> Same as Plan 1.</p>	<p><b>Purchase of Prior Service</b> <b><u>Defined Benefit Component:</u></b> Same as Plan 1, with the following exceptions:</p> <ul style="list-style-type: none"> <li>• Hybrid Retirement Plan members are ineligible for ported service.</li> <li>• The cost for purchasing refunded service is the higher of 4% of creditable compensation or average final compensation.</li> <li>• Plan members have one year from their date of hire or return from leave to purchase all but refunded prior service at approximate normal cost. After that one-year period, the rate for most categories of service will change to actuarial cost.</li> </ul> <p><b><u>Defined Contribution Component:</u></b> Not applicable.</p>

#### ***Pension Plan Data***

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2016 Comprehensive Annual Financial Report (CAFR). A copy of the 2016 VRS CAFR may be downloaded from the VRS website at <http://www.varetire.org/Pdf/Publications/2016-annual-report.pdf>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 5 – PENSION PLAN: (CONTINUED)**

#### ***Employees Covered by Benefit Terms***

As of the June 30, 2015 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

	<b>Number</b>
Inactive members or their beneficiaries currently receiving benefits	18
Inactive members:	
Vested inactive members	3
Non-vested inactive members	14
Inactive members active elsewhere in VRS	8
Total inactive members	25
Active members	32
Total covered employees	75

#### ***Contributions***

The contribution requirement for active employees is governed by §51.1-145 of the Code of Virginia, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement. Prior to July 1, 2012, all or part of the 5.00% member contribution may have been assumed by the employer. Beginning July 1, 2012 new employees were required to pay the 5% member contribution. In addition, for existing employees, employers were required to begin making the employee pay the 5.00% member contribution. This could be phased in over a period of up to 5 years and the employer is required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution.

The Authority's contractually required contribution rate for the year ended June 30, 2017 was 7.10% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Authority were \$113,903 and \$136,390 for the years ended June 30, 2017 and June 30, 2016, respectively.

#### ***Net Pension (Asset) Liability***

The Authority's net pension (asset) liability was measured as of June 30, 2016. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2015, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2016.

#### ***Actuarial Assumptions – General Employees***

The total pension liability for General Employees in the Authority's Retirement Plan was based on an actuarial valuation as of June 30, 2015, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2016.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 5 – PENSION PLAN: (CONTINUED)**

#### ***Actuarial Assumptions – General Employees (continued)***

Inflation	2.5%
Salary increases, including inflation	3.5% – 5.35%
Investment rate of return	7.0%, net of pension plan investment expense, including inflation*

\* Administrative expenses as a percent of the market value of assets for the last experience study were found to be approximately 0.06% of the market assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of pension liabilities.

Mortality rates: 14% of deaths are assumed to be service related

#### **Largest 10 – Non-LEOS:**

##### **Pre-Retirement:**

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 4 years and females set back 2 years

##### **Post-Retirement:**

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with males set forward 1 year

##### **Post-Disablement:**

RP-2000 Disability Life Mortality Table Projected to 2020 with males set back 3 years and no provision for future mortality improvement

#### **All Others (Non 10 Largest) – Non-LEOS:**

##### **Pre-Retirement:**

RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 4 years and females set back 2 years

##### **Post-Retirement:**

RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with males set forward 1 year

##### **Post-Disablement:**

RP-2000 Disability Life Mortality Table Projected to 2020 with males set back 3 years and no provision for future mortality improvement

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period from July 1, 2008 through June 30, 2012. Changes to the actuarial assumptions as a result of the experience study are as follows:

#### **Largest 10 – Non-LEOS:**

- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

#### **All Others (Non 10 Largest) – Non-LEOS:**

- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

### **NOTE 5 – PENSION PLAN: (CONTINUED)**

#### ***Long-Term Expected Rate of Return***

The long-term expected rate of return on pension System investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension System investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

<b>Asset Class (Strategy)</b>	<b>Target Allocation</b>	<b>Arithmetic Long-Term Expected Rate of Return</b>	<b>Weighted Average Long-Term Expected Rate of Return</b>
U.S. Equity	19.50%	6.46%	1.26%
Developed Non U.S. Equity	16.50%	6.28%	1.04%
Emerging Market Equity	6.00%	10.00%	0.60%
Fixed Income	15.00%	0.09%	0.01%
Emerging Debt	3.00%	3.51%	0.11%
Rate Sensitive Credit	4.50%	3.51%	0.16%
Non Rate Sensitive Credit	4.50%	5.00%	0.23%
Convertibles	3.00%	4.81%	0.14%
Public Real Estate	2.25%	6.12%	0.14%
Private Real Estate	12.75%	7.10%	0.91%
Private Equity	12.00%	10.41%	1.25%
Cash	1.00%	-1.50%	-0.02%
Total	100.00%		5.83%
		Inflation	2.50%
		*Expected arithmetic nominal return	8.33%

\* Using stochastic projection results provides an expected range of real rates of return over various time horizons. Looking at one year results produces an expected real return of 8.33% but also has a high standard deviation, which means there is high volatility. Over larger time horizons the volatility declines significantly and provides a median return of 7.44%, including expected inflation of 2.50%.

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

## **NOTE 5 – PENSION PLAN: (CONTINUED)**

### ***Discount Rate***

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the employer for the Appomattox River Water Authority Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, 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 long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

### ***Changes in Net Pension Liability (Asset)***

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a) - (b)
Balances at June 30, 2015	\$ 3,912,177	\$ 3,385,525	\$ 526,652
Changes for the year:			
Service cost	\$ 172,484	\$ -	\$ 172,484
Interest	269,159	-	269,159
Differences between expected and actual experience	(199,473)	-	(199,473)
Contributions - employer	-	136,390	(136,390)
Contributions - employee	-	76,911	(76,911)
Net investment income	-	62,297	(62,297)
Benefit payments, including refunds of employee contributions	(134,098)	(134,098)	-
Administrative expenses	-	(2,045)	2,045
Other changes	-	(26)	26
Net changes	\$ 108,072	\$ 139,429	\$ (31,357)
Balances at June 30, 2016	\$ 4,020,249	\$ 3,524,954	\$ 495,295

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

### **NOTE 5 – PENSION PLAN: (CONTINUED)**

#### ***Sensitivity of the Net Pension Liability (Asset) to Changes in the Discount Rate***

The following presents the net pension liability (asset) of the Authority using the discount rate of 7.00%, as well as what the Authority's net pension liability (asset) 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:

	Rate		
	(6.00%)	(7.00%)	(8.00%)
South Central Wastewater Authority			
Net Pension Liability (Asset)	\$ 1,030,361	\$ 495,295	\$ 52,036

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

For the year ended June 30, 2017, the Authority recognized pension expense of \$40,203. At June 30, 2017, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	\$ -	\$ 192,001
Net difference between projected and actual earnings on pension plan investments	91,555	-
Employer contributions subsequent to the measurement date	113,903	-
Total	\$ 205,458	\$ 192,001

\$113,903 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as an increase of the Net Pension Liability (Asset) in the year ended June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30	
2018	\$ (86,913)
2019	(64,645)
2020	15,634
2021	35,478
Thereafter	-

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 6 – OTHER POSTEMPLOYMENT BENEFITS PLAN:**

#### **A. Plan Description:**

General employees can purchase health insurance at published rates if they retire under the VRS general employees plan. Reduced retirement under the VRS plan is at the earlier of age 50 with 10 years of service or age 55 with 5 years of service. If hired after July 1, 2010 and do not have 5 years of vested service by January 1, 2013 then the earlier retirement age is the earlier of age 60 with 5 years of service or 90 combined age and service points for other employees.

#### **B. Funding Policy:**

These benefits are financed on a pay-as-you-go basis.

An actuarial valuation was performed as of July 1, 2013 to determine the Net OPEB obligation. The plan is not funded. The valuation used the projected unit cost method, with linear pro-ratio to assumed benefit commencement.

#### **C. Annual OPEB Cost and Net OPEB Obligation:**

The Authority's annual other postemployment benefit (OPEB) cost (expense) is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize and unfunded actuarial liabilities (or funding excess) over a period not exceeding thirty years. The following table shows the components of the Authority's annual OPEB cost for the year, the amount actually contributed to the plan, and changes in the Authority's net OPEB obligation.

Annual required contribution	\$	15,000
Interest on net OPEB obligation		2,100
Adjustment to annual required contribution		<u>(2,400)</u>
Annual OPEB cost (expense)	\$	14,700
Contributions made		<u>2,600</u>
Increase in net OPEB obligation	\$	12,100
Net OPEB obligation, beginning of year		<u>59,700</u>
Net OPEB obligation, end of year	\$	<u><u>71,800</u></u>



## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 6 – OTHER POSTEMPLOYMENT BENEFITS PLAN: (CONTINUED)**

#### **C. Annual OPEB Cost and Net OPEB Obligation: (Continued)**

The Authority's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal year ending June 30, 2017 and the two previous fiscal years were as follows:

<b><u>Fiscal Year Ended</u></b>	<b><u>Annual OPEB Cost</u></b>	<b><u>Percentage of Annual OPEB Cost Contributed</u></b>	<b><u>Net OPEB Obligation</u></b>
June 30, 2015	\$ 16,700	68%	\$ 55,200
June 30, 2016	17,500	74%	59,700
June 30, 2017	14,700	18%	71,800

#### **D. Funded Status and Funding Progress:**

As of July 1, 2016, the most recent actuarial valuation date, the plan was 0% funded. The unfunded actuarial accrued liability (UAAL) is \$123,900. The covered payroll (annual payroll of active employees covered by the plan) was unavailable.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

#### **E. Actuarial Methods and Assumptions:**

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan member to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the July 1, 2016 actuarial valuation, the projected unit credit actuarial cost method was used. The actuarial assumptions included a 3.50% investment rate of return (net of administrative expenses), which is expected long-term investment returns on the employer's own investments calculated, and an annual healthcare cost trend rate of 7.5% initially, gradually decreasing over time. By 2030 the rate of increase is 5.70%, and by 2050 5.0%. The rates include a 2.5% inflation assumption. The UAAL is being amortized as a level percentage of projected payroll on a closed basis over thirty years.



## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 7 – DEFERRED COMPENSATION PLAN:**

Eligible employees of the Authority may participate in a deferred compensation plan in accordance with Internal Revenue Code section 457. The plan permits participants to defer a portion of their salary until future years. The deferred compensation is not available to employees until termination of employment, retirement, death or an unforeseen emergency. The Authority has no fiduciary responsibility for the plan, has no liability for losses incurred under the plan as the plan is administered by the U.S. Conference of Mayors and the plan is not accessible by the Authority's creditors; therefore, any related assets and liabilities are not reflected in the financial statements.

### **NOTE 8 – COMPENSATED ABSENCES:**

Accumulated unpaid vacation, vested sick leave and other compensatory leave amounts are accrued when incurred. At June 30, 2017 and 2016 liabilities were as follows:

		<u>2017</u>	<u>2016</u>
Accumulated and compensatory leave	\$	<u>216,179</u>	<u>\$ 179,905</u>

Sick leave is vested and payable, and accordingly recorded as a liability in the financial statements, upon eligible retirement from the Authority.

### **NOTE 9 – NUTRIENT CREDIT PURCHASES:**

During the current year, the Authority was required to purchase nutrient credits in order to remain in compliance with environmental regulations. The total cost of the credits during fiscal year 2017 was \$829,652. The Authority will be required to purchase credits in future years to comply with environmental regulations until the Authority completes the nutrient upgrade project (reference Note 12) to reduce the levels of nitrogen and phosphorus. The SCWWA Board committed to purchase credits from the Virginia Nutrient Credit Exchange Association and from Chesterfield County.

### **NOTE 10 – COMMITMENTS:**

The Authority is in the initial stages of an approximately \$55,000,000 (in 2010 dollars – year in which estimate was established) plant improvement to reduce nitrogen and phosphorus in the effluent, as required by the Chesapeake Bay restoration standards. This improvement will be primarily financed by obtaining grant funding and through the issuance of bonds. The bonds will be repaid by the member localities based on their share of the plant capacity. The Board deferred this upgrade due to the cost of debt service versus nutrient credits.

### **NOTE 11 – ACCOUNTS RECEIVABLE – REPAYMENT AGREEMENT:**

As previously disclosed, the City of Petersburg was delinquent in their obligations to the Authority. The Authority and the City of Petersburg entered into an agreement dated January 3, 2017 documenting repayment terms for past due amounts. The agreement provides for repayment of past due obligations in the amount of \$832,193. The terms of the agreement provide for monthly payments by the City of Petersburg commencing January 15, 2017 and ending August 15, 2018. The outstanding balance owed to the Authority accrues interest at 1% above the prime interest rate as published by the Authority's bank. The rate was 4.50% during fiscal year 2017. The outstanding balance at June 30, 2017 was \$511,523.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 12 – RELATED PARTY TRANSACTIONS:**

The Authority is governed by a common Board of Directors with the Appomattox River Water Authority (“ARWA”). The Authority has an agreement with ARWA to share several key positions utilized by both the Authority and ARWA. Accordingly, the two Authorities share personnel costs necessary to fund the positions. During the current fiscal year the Authority paid reimbursement in the amount of \$211,073 to ARWA including \$107,699 reported as accounts payable at June 30, 2017 for reimbursement of salary and benefits paid to ARWA employees that allocate time and duties with SCWWA. Similarly, the Authority receives a reimbursement from ARWA for salary and benefits for SCWWA employees that allocate time and duties with ARWA. The Authority reported a reimbursement of \$218,859 from ARWA.

During 2013, the Authority entered into an agreement with Chesterfield County (the “County”), a member locality, to begin purchasing nitrogen and phosphorus credits from the County to remain in compliance with environmental regulations as disclosed in Note 9. The agreement was to commence with compliance year 2015 and for each year thereafter through and including compliance year 2017. During 2017, the Authority executed an agreement with the County to further extend this agreement for compliance years 2018, 2019, and 2020.

### **NOTE 13 - RISK MANAGEMENT:**

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 joined together with other local governments in the State to form the Virginia Municipal Group Self Insurance Association, a public entity risk pool currently operating as a common risk management and insurance program for member governments. The Authority pays an annual premium to the pool for its workers compensation coverage and other liability insurance. The Agreement for Formation of the association provides that the association will be self-sustaining through member premiums. The Authority also participates in the VaRisk2, a group liability self insurance plan, administered by the Commonwealth of Virginia, Department of General Services, Division of Risk Management. The Authority pays an annual premium for its public officials general liability insurance to the public entity risk pool currently operating as a common risk management and insurance program for participating governments. Settled claims have not exceeded pool coverage in any of the past three fiscal years.

The Authority continues to carry commercial insurance for all other risks of loss, including employee health and accident insurance. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

### **NOTE 14 – UPCOMING PRONOUNCEMENTS:**

Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pension*, improves accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). This Statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple Employer Plans*, for OPEB. Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, establishes new accounting and financial reporting requirements for OPEB plans. This Statement is effective for fiscal years beginning after June 15, 2017.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2017 (Continued)

---

### **NOTE 14 – UPCOMING PRONOUNCEMENTS: (CONTINUED)**

Statement No. 81, Irrevocable Split-Interest Agreements, improves accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2016, and should be applied retroactively.

Statement No. 83, Certain Asset Retirement Obligations, addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018.

Statement No. 86, Certain Debt Extinguishment Issues, improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources—resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017.

Statement No. 87, Leases, increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019.

Management is currently evaluating the impact these standards will have on the financial statements when adopted.

**- Required Supplementary Information -**

# SOUTH CENTRAL WASTEWATER AUTHORITY

Petersburg, Virginia

## Schedule of Changes in Net Pension (Asset) Liability and Related Ratios For the Year Ended June 30, 2017

	<u>2016</u>	<u>2015</u>	<u>2014</u>
<b>Total pension liability</b>			
Service cost	\$ 172,484	\$ 171,384	\$ 164,219
Interest	269,159	257,015	238,485
Differences between expected and actual experience	(199,473)	(116,926)	-
Benefit payments, including refunds of employee contributions	(134,098)	(141,873)	(134,116)
<b>Net change in total pension liability</b>	<u>\$ 108,072</u>	<u>\$ 169,600</u>	<u>\$ 268,588</u>
<b>Total pension liability - beginning</b>	<u>3,912,177</u>	<u>3,742,577</u>	<u>3,473,989</u>
<b>Total pension liability - ending (a)</b>	<u><u>\$ 4,020,249</u></u>	<u><u>\$ 3,912,177</u></u>	<u><u>\$ 3,742,577</u></u>
 <b>Plan fiduciary net position</b>			
Contributions - employer	\$ 136,390	\$ 134,611	\$ 136,218
Contributions - employee	76,911	76,008	73,798
Net investment income	62,297	148,134	429,411
Benefit payments, including refunds of employee contributions	(134,098)	(141,873)	(134,116)
Administrative expense	(2,045)	(1,930)	(2,224)
Other	(26)	(31)	22
<b>Net change in plan fiduciary net position</b>	<u>\$ 139,429</u>	<u>\$ 214,919</u>	<u>\$ 503,109</u>
<b>Plan fiduciary net position - beginning</b>	<u>3,385,525</u>	<u>3,170,606</u>	<u>2,667,497</u>
<b>Plan fiduciary net position - ending (b)</b>	<u><u>\$ 3,524,954</u></u>	<u><u>\$ 3,385,525</u></u>	<u><u>\$ 3,170,606</u></u>
 <b>Political subdivision's net pension (asset) liability - ending (a)</b>	 \$ 495,295	 \$ 526,652	 \$ 571,971
 <b>Plan fiduciary net position as a percentage of the total pension (asset) liability</b>	 87.68%	 86.54%	 84.72%
 <b>Covered payroll</b>	 \$ 1,548,944	 \$ 1,525,607	 \$ 1,478,344
 <b>Political subdivision's net pension (asset) liability as a percentage of covered payroll</b>	 32%	 35%	 39%

This schedule is intended to report information for 10 years. Information prior to the 2014 valuation is not available. Additional years will be included when available.

**SOUTH CENTRAL WASTEWATER AUTHORITY**

Petersburg, Virginia

## Schedule of Employer Contributions

For the Year Ended June 30, 2017

<b>Fiscal Year</b>	<b>Contractually Required Contribution (1)</b>	<b>Contributions in Relation to Contractually Required Contribution (2)</b>	<b>Contribution Deficiency (Excess) (3)</b>	<b>Employer's Covered Employee Payroll (4)</b>	<b>Contributions as a % of Covered Payroll (5)</b>
2008	\$ 84,920	\$ 84,920	\$ -	\$ 1,276,989	6.65%
2009	91,520	91,520	-	1,376,242	6.65%
2010	89,943	89,943	-	1,352,533	6.65%
2011	100,996	100,996	-	1,381,616	7.31%
2012	101,125	101,125	-	1,383,382	7.31%
2013	135,056	135,056	-	1,464,815	9.22%
2014	136,303	136,303	-	1,478,344	9.22%
2015	136,218	136,218	-	1,525,607	8.93%
2016	136,390	136,390	-	1,548,944	8.81%
2017	113,903	113,903	-	1,623,382	7.02%

This schedule is intended to report information for 10 years. Fiscal year 2015 is the first year for this presentation, no other data is available. Additional years will be included when available.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Petersburg, Virginia

### **Notes to Required Supplementary Information For the Year Ended June 30, 2017**

---

**Changes of benefit terms** – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this is a fairly new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2016 are not material.

**Changes of assumptions** – The following changes in actuarial assumptions were made effective June 30, 2013 based on the most recent experience study of the System for the four-year period ending June 30, 2012:

**Largest 10 – Non-LEOS:**

- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

**All Others (Non 10 Largest) – Non-LEOS:**

- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

**SOUTH CENTRAL WASTEWATER AUTHORITY**

Petersburg, Virginia

---

**Schedule of OPEB Funding Progress**

---

<b>Actuarial Valuation Date</b>	<b>Actuarial Value of Assets</b>	<b>Actuarial Accrued Liability (AAL)</b>	<b>Unfunded Actuarial Accrued Liability (UAAL)</b>	<b>Funded Ratio</b>	<b>Covered Payroll</b>	<b>UAAL as a Percentage of Covered Payroll</b>
July 1, 2013	\$ -	\$ 166,800	\$ 166,800	0.00%	\$ N/A	N/A
July 1, 2014*	-	172,000	172,000	0.00%	N/A	N/A
July 1, 2015*	-	176,000	176,000	0.00%	N/A	N/A
July 1, 2016	-	123,900	123,900	0.00%	N/A	N/A

\* The July 1, 2013 actuarial valuation included a rollforward of the unfunded actuarial liability related information.



**- Compliance -**

---

**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 Honorable Board of Directors  
South Central Wastewater Authority  
Petersburg, Virginia**

We have audited, in accordance with the 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 the *Specifications for Audits of Authorities, Boards, and Commissions*, issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the business-type activities of South Central Wastewater Authority as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise South Central Wastewater Authority's basic financial statements and have issued our report thereon dated September 26, 2017.

## **Internal Control over Financial Reporting**

In planning and performing our audit of the financial statements, we considered South Central Wastewater 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 South Central Wastewater Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of South Central Wastewater 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. 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.

## Compliance and Other Matters

As part of obtaining reasonable assurance about whether South Central Wastewater 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 entity'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.

A handwritten signature in cursive script that reads "Robinson, Farmer, Cox Associates".

Charlottesville, Virginia  
September 26, 2017

- **Status Report: Ongoing Projects/Operational and Financial/Inflow and Infiltration**

Following are status reports concerning the Ongoing Project, Operation, Financial, and Inflow and Infiltration for the SCWWA.

## MEMORANDUM

**TO:** SOUTH CENTRAL WASTEWATER AUTHORITY BOARD OF DIRECTORS

**FROM:** ROBERT C. WICHSER, EXECUTIVE DIRECTOR  
JAMES C. GORDON, ASSISTANT EXECUTIVE DIRECTOR

**SUBJECT:** STATUS REPORT – ON-GOING PROJECTS

**DATE:** November 16, 2017

The following projects are underway. This report includes sections on Capital projects and large replacement projects.

### Waterline Replacement Project

- The new waterline is installed and operational.
- Awaiting heaters and heat tracing on hot boxes, and pavement repair.
- Anticipate completion of this project this month.

### Wastewater Treatment Plant Improvements, Phase 2

- This project includes 2 new grit classifier assemblies, 2 new scum concentrators, and grout repairs in secondary clarifier 1 and 2.
- This project was awarded to Anderson Construction and a preconstruction meeting was held on 10.3.2017.
- Shop drawing submissions and reviews are ongoing.
- Due to the long lead needed to order this equipment, the Notice to Proceed in 12.4.17.
- DEQ has issued the Certificate to Construct for this project.

### Warehouse Project

- The selected site for the warehouse is near the entrance gate adjacent to I-95 right of way. Preliminary soil borings indicated poor soils at this site and rock at a depth of 30-40 feet.
- Based on consultation with SCWWA, it has been decided that the foundation for this facility will be pile supported with end bearing piles terminated to in rock formations.
- Additional soil borings are being performed to advance the design of the foundation system.
- In lieu of stormwater management facilities, we anticipate placing the river RPA buffer in conservation on a 6 to 1 basis with a dedicated conservation easement.

### Annual Maintenance Inspection

- The Annual Maintenance Inspection has been completed and staff has received the Annual Maintenance Inspection Report.

## MEMORANDUM

**TO: SOUTH CENTRAL WASTEWATER AUTHORITY BOARD OF DIRECTORS**

**FROM: ROBERT C. WICHSER, EXECUTIVE DIRECTOR**  
**JAMES C. GORDON, ASST. EXECUTIVE DIRECTOR**

**SUBJECT: OPERATING & FINANCIAL STATUS REPORT**

**DATE: November 16, 2017**

### **Operating Status Report:**

#### **General:**

- The next scheduled Board of Directors Meeting is Thursday January 18, 2017 at the Appomattox River Water Authority at 2:00 pm.
- Due to some treatment difficulties the number of loads of leachate originating from the Charles City and Amelia has been decreased to 16 loads.
- The FY2017 Audit is complete and ready for presentation at this meeting.

#### **Status of Nutrient Waste-load**

- Total Phosphorus (TP)
  - Waste-load allocation Total Phosphorus: 28,404 lbs. on a calendar basis (reduced from 35,024 in 2016)
  - Proportional waste-load through October 2017 = 23,670 lbs. Total actual waste-load through October 2017 was 14,237 lbs. (At this time, the SCWWA is 9,433 lbs. of TP under our expected waste-load allocation for this point in the year)
- Total Nitrogen (TN)
  - Waste-load allocation Total Nitrogen: 350,239 lbs. on a calendar basis
  - Proportional waste-load through October 2017 = 291,866. Total actual waste-load through October 2017 was 477,534 lbs. (At this time, the SCWWA is 185,668 lbs. of TN over our expected waste-load allocation for this point in the year.)
  - Note: The SCWWA is locked-in to purchasing an additional 165,451 credits for 2017. The SCWWA has also budgeted for additional nutrients if needed.

#### **Operations:**

- Plant effluent met all discharge permit requirements for the months of September and October. Copies of the discharge monitoring reports (DMR's) for the VPDES permit and the general permit are available.
- Synagro has been removing biosolids on a more regular monthly basis.
- The sandblasting and painting in Clarifiers 1 and 2 is now complete.
- Staff is monitoring leachate offloads and maintaining 2 loads per hour so they are spread throughout the day.
- Temporary alum feed line

#### **Maintenance:**

- Work continues on upgrading power to the Chlorine Contact Tanks to prepare for the installation of the actuators.
- Staff has begun to switch pumps from seal water to mechanical seals.
- Live bottom bin #1 on the solids lime system will be upgraded over the winter.
- There was a failure with the chain and flights in Primary Basin #3. Repairs are expected to take approximately 1.5 weeks and staff has all the necessary supplies to perform the repairs.

- Evaluating quotes and credentials for selection of the welder to install the stainless steel lines in the caustic feed room at the primaries.

**Instrumentation**

- Staff met with our IT support to review upgrade of wireless service so the company security protocols are expanded to all wireless connections
- The new servers are being installed and setup with virtualization software.
- Staff is obtaining quotes to calibrate the influent meters.

**Laboratory**

- Finalizing pretreatment reports and inspections for the end of the year.
- Preparing a brochure to distribute to members with pretreatment programs managed by the Authority regarding the final Dental Amalgam Rule.

**Financial Status Report:**

Following is the Executive Summary of the Monthly Financial Statement that includes the YTD Budget Performance and the Financial Statement for October 2017.

South Central Wastewater Authority  
YTD Income Statement for the period ending October 31, 2017

Wastewater Rate Center

Revenues and Expenses Summary

**Operating Budget vs. Actual**

**Revenues**

	<i>Budget</i> <i>FY 17/18</i>	<i>Budget</i> <i>Year-to-Date</i>	<i>Actual</i> <i>Year-to-Date</i>	<i>Budget</i> <i>vs. Actual</i>	<i>Variance</i> <i>Percentage</i>
Septage/Misc Revenue	\$ 1,500,000	\$ 500,000	\$ 556,961	\$ 56,961	11.39%
O&M Revenue	\$ 7,084,300	\$ 2,361,433	\$ 2,361,433	\$ -	0.00%
Reserve Policy	\$ 685,868	\$ 228,623	\$ 228,623	\$ (0)	0.00%
ER&RF Revenue	\$ 429,215	\$ 143,072	\$ 142,072	\$ (1,000)	-0.70%
<b>Total Operating Revenues</b>	<b>\$ 9,699,383</b>	<b>\$ 3,233,128</b>	<b>\$ 3,289,089</b>	<b>\$ 55,961</b>	<b>1.73%</b>

**Expenses**

Personnel Cost	\$ 2,629,500	\$ 876,500	\$ 919,045	\$ 42,549	4.85%
Contractual/Professional Services	\$ 346,300	\$ 145,995	\$ 79,313	\$ (66,682)	-45.67%
Utilities	\$ 490,000	\$ 163,333	\$ 130,527	\$ (32,807)	-20.09%
Communication/Postage/Freight	\$ 20,000	\$ 6,667	\$ 5,916	\$ (750)	-11.26%
Office/Lab/Purification Supplies	\$ 73,500	\$ 25,033	\$ 21,494	\$ (3,539)	-14.14%
Insurance	\$ 65,000	\$ 43,333	\$ 32,425	\$ (10,909)	-25.17%
Lease/Rental Equipment	\$ 11,000	\$ 3,667	\$ 1,998	\$ (1,668)	-45.50%
Travel/Training/Dues	\$ 63,600	\$ 33,050	\$ 17,162	\$ (15,888)	-48.07%
Safety/Uniforms	\$ 41,500	\$ 13,833	\$ 13,176	\$ (657)	-4.75%
Chemicals/Sludge Disposal	\$ 910,000	\$ 303,333	\$ 208,619	\$ (94,714)	-31.22%
Repair/Maintenance Parts & Supplies	\$ 492,500	\$ 164,167	\$ 151,782	\$ (12,384)	-7.54%
<b>Total Operating Expenses</b>	<b>\$ 5,142,900</b>	<b>\$ 1,778,912</b>	<b>\$ 1,581,463</b>	<b>\$ (197,449)</b>	<b>-11.10%</b>
<b>Operating Suplus/(Deficit)</b>	<b>\$ 4,556,483</b>	<b>\$ 1,454,216</b>	<b>\$ 1,707,626</b>	<b>\$ 253,411</b>	<b>17.43%</b>

**Replacement Outlay Budget vs. Actual**

Machinery & Equipment	\$ 350,000	\$ 116,667	\$ 26,511	\$ (90,156)	-77.28%
Instrumentation	\$ 43,500	\$ 14,500	\$ 708	\$ (13,792)	-95.12%
SCADA	\$ 36,000	\$ 12,000	\$ -	\$ (12,000)	-100.00%
Computer Equipment	\$ 25,600	\$ 8,533	\$ 1,299	\$ (7,235)	-84.78%
Motor Vehicles	\$ 75,000	\$ 25,000	\$ -	\$ (25,000)	-100.00%
Construction	\$ 1,540,000	\$ 513,333	\$ 249,681	\$ (263,652)	-51.36%
Special Studies	\$ 35,000	\$ 11,667	\$ -	\$ (11,667)	-100.00%
<b>Total Replacement Outlay</b>	<b>\$ 2,105,100</b>	<b>\$ 701,700</b>	<b>\$ 278,198</b>	<b>\$ (423,502)</b>	<b>-60.35%</b>

**Other Income/Expense Budget vs. Actual**

Nutrient Credit Purchases (Expense)	\$ 860,000	\$ 286,667	\$ 289,792	\$ 143,333	50.00%
Nutrient Reduction	\$ -	\$ -	\$ 4,342	\$ -	#DIV/0!
Interest-Jurisdictions (Income)	\$ -	\$ -	\$ (221,907)	\$ (221,907)	#DIV/0!



# South Central Wastewater Authority

For Month Ending October 31, 2017

## Assets

### Current Assets

Petty Cash	\$	250
Wells Fargo Operating Account	\$	2,463,612
<b>Total Unrestricted Cash</b>	<b>\$</b>	<b>2,463,862</b>

Wells Fargo Reserve	\$	3,459,169
Wells Fargo Capital Improvement Reserve	\$	1,989,616
ERRF	\$	2,625,852
<b>Total Restricted Cash</b>	<b>\$</b>	<b>8,074,637</b>

<b>Total Checking/Savings</b>	<b>\$</b>	<b>10,538,499</b>
-------------------------------	-----------	-------------------

Accounts Receivable	\$	154,274
Long Term Receivable (Petgs/Legal)	\$	95,839

<b>Total Current Assets</b>	<b>\$</b>	<b>10,788,612</b>
-----------------------------	-----------	-------------------

### Fixed Assets

Sewer System Plant	\$	33,352,033
Equipment & Vehicles	\$	2,974,264
Plant Machinery	\$	7,408,956
Construction in Progress	\$	1,907,962
Land	\$	92,968
Accumulated Depreciation	\$	(27,480,849)
<b>Total Fixed Assets</b>	<b>\$</b>	<b>18,255,333</b>

### Other Assets

Inventory	\$	656,081
Pension	\$	113,903

<b>Total Other Assets</b>	<b>\$</b>	<b>769,985</b>
---------------------------	-----------	----------------

## Total Assets

<b>\$</b>	<b>29,813,930</b>
-----------	-------------------

## Liabilities & Equity

### Current Liabilities

Accounts Payable	\$	19,069
<b>Total Current Liabilities</b>	<b>\$</b>	<b>19,069</b>

### Other Current Liabilities

Payroll Accruals	\$	216,180
Retainage Payable	\$	-
Suspense-Clearing Account	\$	286,667
Refunds Due Member Localities	\$	727,455
<b>Total Other Current Liabilities</b>	<b>\$</b>	<b>1,230,301</b>

### Long Term Liabilities

Net OPEB Obligation	\$	71,800
Def Inf Res-Net Dif Pension Inv	\$	100,446
Net Pension Liability	\$	495,295
<b>Total Long-Term Liabilities</b>	<b>\$</b>	<b>667,541</b>

## Total Liabilities

<b>\$</b>	<b>1,916,911</b>
-----------	------------------

## Equity

Retained Earnings	\$	12,808,125
Initial Locality Contribution Cap.	\$	14,166,822

Net Income	\$	922,072
<b>Total Equity</b>	<b>\$</b>	<b>27,897,019</b>

## Total Liabilities & Equity

<b>\$</b>	<b>29,813,930</b>
-----------	-------------------

## MEMORANDUM

**TO:** SOUTH CENTRAL WASTEWATER AUTHORITY BOARD OF DIRECTORS

**FROM:** ROBERT C. WICHSER, EXECUTIVE DIRECTOR  
JAMES C. GORDON, ASSISTANT EXECUTIVE DIRECTOR

**SUBJECT:** INFLOW AND INFILTRATION

**DATE:** November 16, 2017

September 2017 was extremely dry with  $\frac{3}{4}$  of the precipitation occurring on the first day of the month. Flows steadily decreased throughout the month. October 2017 precipitation totals were in line with historical trends. The main precipitation events occurred in the last third of the month. Each rain event was followed by a surge in flows that quickly returned to the monthly average flows. This is why the average and minimum flows are so close to each other. This shows a good correlation between precipitation events and plant flows.

Month	Rainfall (inches)	Average Flow (mgd)
October 2016	3.65	14.198
November 2016	1.16	9.194
December 2016	2.28	9.980
January 2017	3.31	14.509
February 2017	1.03	10.873
March 2017	4.90	11.681
April 2017	1.46	11.152
May 2017	6.88	12.444
June 2017	2.19	10.264
July 2017	4.38	9.741
August 2017	8.78	13.098
September 2017	1.27	11.028
October 2017	3.64	8.988

### PRIMARY FLOW DATA

October	2017	2016	2015	2014	2013	2012	2011
Minimum (mgd)	8.246	8.130	8.854	7.329	8.876	9.438	10.575
Maximum (mgd)	13.546	10.663	22.241	13.982	19.356	19.863	18.943
Average (mgd)	8.988	14.198	10.908	9.242	10.773	10.913	12.332
Rainfall (inches)	3.64	3.65	3.43	2.6	5.22	3.99	3.13

- **Proposed 2018 Board Meeting Dates**

Following is a memo regarding the proposed Schedule for the 2018 Board of Directors meetings

## MEMORANDUM

**TO: SOUTH CENTRAL WASTEWATER AUTHORITY: BOARD OF DIRECTORS  
APPOMATTOX RIVER WATER AUTHORITY: BOARD OF DIRECTORS**

**FROM: ROBERT C. WICHSER, EXECUTIVE DIRECTOR  
JAMES GORDON, ASSISTANT EXECUTIVE DIRECTOR**

**SUBJECT: PROPOSED SCHEDULE FOR 2018 BOARD OF DIRECTORS:  
SOUTH CENTRAL WASTEWATER AUTHORITY MEETINGS  
APPOMATTOX RIVER WATER AUTHORITY MEETINGS**

**DATE: NOVEMBER 16, 2017**

Staff is proposing a similar schedule as followed in 2018 for the Board of Directors meetings. The South Central Wastewater Authority-based meetings are held at 900 Magazine Road, Petersburg, Virginia, unless otherwise notified as to an alternative location. The Appomattox River Water Authority-based meetings will be held in the Appomattox River Water Authority Board Room located at 21300 Chesdin Road, Petersburg, Virginia, unless otherwise notified as to an alternative location. Special Board Meetings may be called based on specific needs. The proposed 2018 Board meeting schedule is as follows:

MONTH/DAY	LOCATION
January 18	Appomattox River Water Authority
March 15	South Central Wastewater Authority
May 17	Appomattox River Water Authority
June 21	Appomattox River Water Authority
July 19	Appomattox River Water Authority
August 16	Appomattox River Water Authority
September 13	South Central Wastewater Authority
November 15	South Central Wastewater Authority

*Note: VML Annual Conference: September 30-October 2, 2018  
VLGMA Winter Conference: February 12-14, 2018*

### BOARD ACTION REQUESTED:

Staff recommends that the Board approve the proposed schedule of regular meeting dates for 2018 as presented above.

**5. Items from Counsel**

**6. Closed Session**

**7. Other Items from Board Members/Staff Not on Agenda**

**8. Adjourn**