

# **South Central Wastewater Authority**



## **Financial Statements Year Ended June 30, 2020**

# South Central Wastewater Authority

## Financial Statements Year Ended June 30, 2020

# **SOUTH CENTRAL WASTEWATER AUTHORITY**

## **Petersburg, Virginia**

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

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

Douglas E. Smith, Chairman  
*City of Colonial Heights*

Aretha Ferrell-Benavides, Vice-Chairman  
*City of Petersburg*

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

Dr. Joseph P. Casey, Member  
*Chesterfield County*

Percy C. Ashcraft, Member  
*Prince George County*

W. Kevin Massengill  
*County of Dinwiddie*

### **- Officials -**

Robert B. Wilson, P.E., Executive Director

James C. Gordon, Assistant Executive Director

McGuire Woods, Counsel

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ROBINSON, FARMER, COX ASSOCIATES, PLLC

*Certified Public Accountants*

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**Independent Auditors' Report**

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**To the Honorable Members of  
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, 2020, and the related notes to the financial statements, which collectively comprise the 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, 2020, 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 3-9 and 40-47 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***

We have previously audited South Central Wastewater Authority's 2019 financial statements, and we expressed an unmodified audit opinion on those audited financial statements in our report dated November 8, 2019. In our opinion, the summarized comparative information presented herein as of and for the year ended June 30, 2019, 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 October 30, 2020, 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 solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of South Central Wastewater Authority's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering South Central Wastewater Authority's internal control over financial reporting and compliance.

*Robinson, Farmer, Cox Associates*

Charlottesville, Virginia  
October 30, 2020

## Management's Discussion and Analysis

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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 ending June 30, 2020.

### **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.

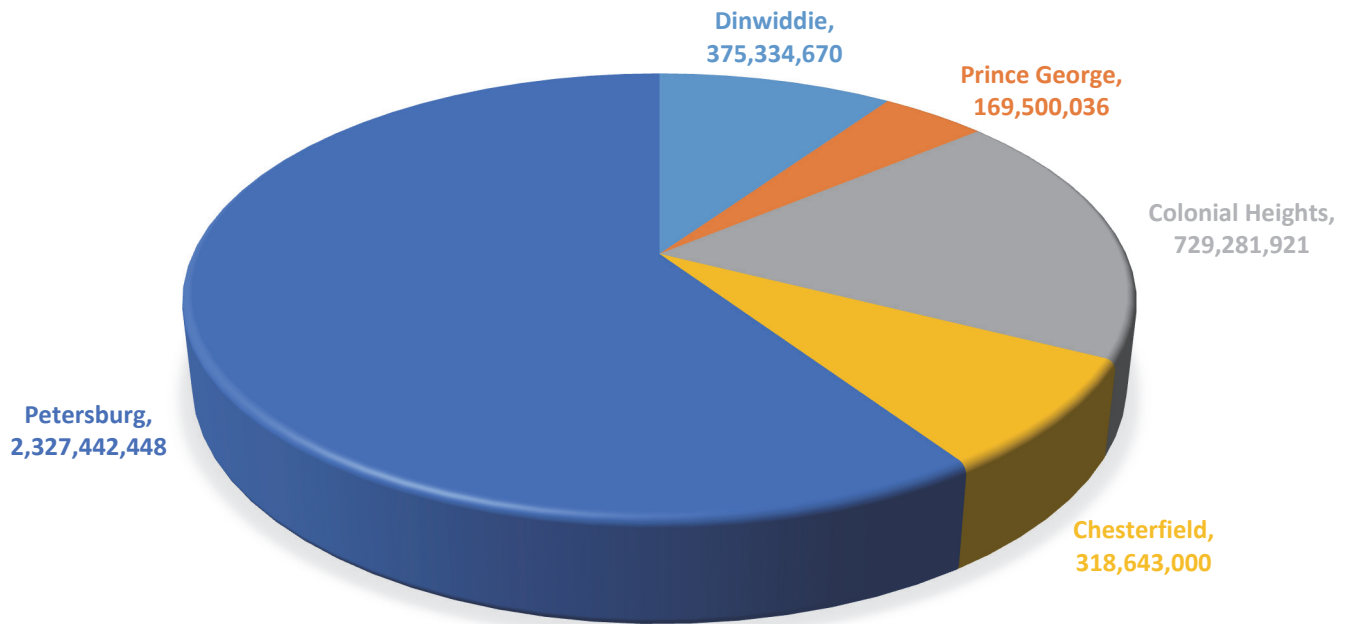
### **Summary of South Central Wastewater Authority Operations**

The South Central Wastewater Authority (SCWWA) staff includes thirty-three (33) full-time employees and contributes to the salaries of the Executive Director, Office/Business 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 flows 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. South Central Wastewater Authority does not own or operate any of the collections systems.

## Summary of South Central Wastewater Authority Operations: (Continued)

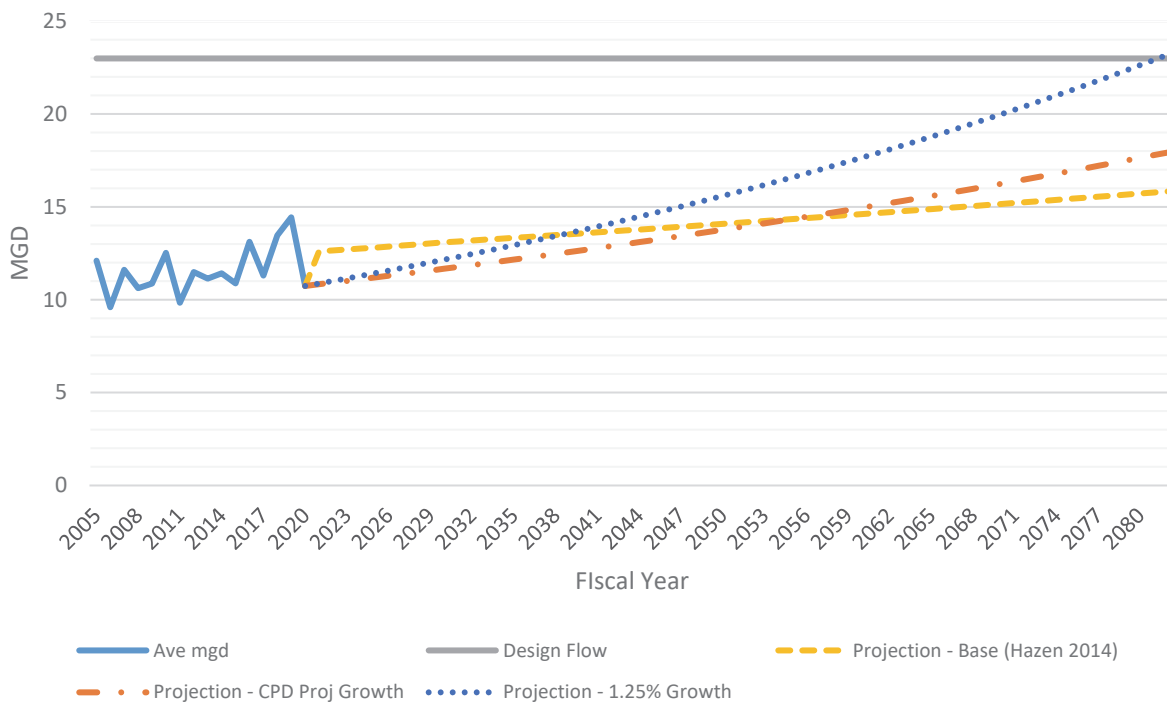
### FY2020 SCWWA MEMBER FLOWS RECEIVED FOR TREATMENT

(TOTAL GALLONS)



The treated effluent from the SCWWA wastewater treatment facility discharges to the Appomattox River, a tributary of the James River, a major watershed of the Chesapeake Bay. FY2020 was drier than normal which impacted flows. Based on data since 2005, average flows appear to be fairly flat but are variable depending on the rainfall experienced within the fiscal year. Growth projections based off the Base Hazen 2014 projections and the Crater Plan District (CPD) Growth projection show flows at approximately 14mgd in 2050.

### South Central Wastewater Authority Projected Annual Wastewater flows





## **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 \$32,555,913 (net position). Of this amount, \$15,610,698 is reported as unrestricted net position.
- The Authority's total net position increased by \$2,431,405.
- The Authority's total long-term obligations which include net OPEB liability, net pension liability and compensated absences increased by \$163,152 during the current fiscal year. The Authority's investment in capital assets decreased during the year by \$617,252 after recording depreciation expense of \$1,195,209. Details of these items can be found under the heading "*Capital Asset and Debt Administration*".
- Total revenues increased by \$610,714 (net of loss on disposal of capital assets). Total expenses increased by \$579,764 excluding abandoned project costs expensed in fiscal year 2019.
- Refunds due to member localities for FY2020 totals \$69,708.

## **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 \$32,555,913 at the close of the most recent fiscal year.

By far the largest portion of the Authority's net position (52 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>2020</b>                 | <b>2019</b>                 |
| Current and other assets                  | \$ 16,442,436               | \$ 13,905,677               |
| Capital assets                            | 16,945,215                  | 17,562,467                  |
| Total assets                              | <u>\$ 33,387,651</u>        | <u>\$ 31,468,144</u>        |
| Deferred outflows - pension related items | \$ 199,557                  | \$ 104,540                  |
| Deferred outflows - OPEB related items    | 34,594                      | 20,958                      |
| Total deferred outflows                   | <u>\$ 234,151</u>           | <u>\$ 125,498</u>           |
| Long-term liabilities                     | \$ 679,386                  | \$ 516,234                  |
| Other liabilities                         | 238,388                     | 724,494                     |
| Total liabilities                         | <u>\$ 917,774</u>           | <u>\$ 1,240,728</u>         |
| Deferred inflows - pension related items  | \$ 91,843                   | \$ 155,335                  |
| Deferred inflows - OPEB related items     | 56,272                      | 73,071                      |
| Total deferred inflows                    | <u>\$ 148,115</u>           | <u>\$ 228,406</u>           |
| Investment in capital assets              | \$ 16,945,215               | \$ 17,562,467               |
| Unrestricted                              | 15,610,698                  | 12,562,041                  |
| Total net position                        | <u><u>\$ 32,555,913</u></u> | <u><u>\$ 30,124,508</u></u> |

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

## **Financial Analysis: (Continued)**

|   | <b>Change in Net Position</b> |                      |
|---|-------------------------------|----------------------|
|   | <b>2020</b>                   | <b>2019</b>          |
| Revenues:                                   |                               |                      |
| Operating revenues                          | \$ 9,156,126                  | \$ 8,704,387         |
| Gain (loss) on disposal of capital assets   | (48,574)                      | (10,606)             |
| Other nonoperating revenue                  | 132,782                       | 22,591               |
| Investment income                           | 123,113                       | 36,361               |
| Total revenues                              | <u>\$ 9,363,447</u>           | <u>\$ 8,752,733</u>  |
| Expenses:                                   |                               |                      |
| Operating expenses (excluding depreciation) | \$ 5,736,833                  | \$ 5,223,408         |
| Depreciation expense                        | 1,195,209                     | 1,128,870            |
| Abandoned project costs                     | -                             | 1,885,556            |
| Total expenses                              | <u>\$ 6,932,042</u>           | <u>\$ 8,237,834</u>  |
| Increase (decrease) in net position         | \$ 2,431,405                  | \$ 514,899           |
| Net position-July 1                         | <u>30,124,508</u>             | <u>29,609,609</u>    |
| Net position-June 30                        | <u>\$ 32,555,913</u>          | <u>\$ 30,124,508</u> |

The Authority's net position increased by \$2,431,405 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, 2020 amounts to \$16,945,215 (net of accumulated depreciation). Investment in capital assets decreased by approximately 3.5% during the year largely due to annual depreciation. Below is a comparison of the items that make up capital assets as of June 30, 2020 vs. June 30, 2019.

|                          | <b>2020</b>          | <b>2019</b>          |
|--------------------------|----------------------|----------------------|
| Land                     | \$ 92,968            | \$ 92,968            |
| Sewer system plant       | 35,565,964           | 34,919,518           |
| Plant machinery          | 7,323,263            | 7,027,662            |
| Equipment and vehicles   | 2,545,521            | 2,527,576            |
| Accumulated depreciation | (28,582,501)         | (27,836,397)         |
| Construction in progress | -                    | 831,140              |
| Total capital assets     | <u>\$ 16,945,215</u> | <u>\$ 17,562,467</u> |

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

## **Capital Asset and Debt Administration: (Continued)**

**Long-Term Obligations** - At the end of the current fiscal year, the Authority's long-term obligations included net OPEB liability, net pension liability and compensated absences. Total long-term obligations increased by \$163,152 including an increase in the net pension liability, OPEB obligations and compensated absences. The net pension liability comprised the largest portion of the overall increase in the amount of \$120,431.

More detailed information on the Authority's long-term obligations is presented in the notes to the financial statements.

## **Review of Operations**

As previously mentioned, total revenues increased including operating revenues which increased by \$451,739 resulting from a budgeted increase in revenue received from localities. Operating expenses (excluding depreciation) increased \$513,425 over fiscal year 2019 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 2020 was 3.622 mgd less than fiscal year 2019. Rainfall measured at the treatment plant for fiscal year 2020 was 45.79 inches compared to 57.31 inches in fiscal year 2019. Fiscal year 2020 was much drier than 2019 and annual rainfall was below average based on recorded rainfall at the treatment plant since 2005.

|                    |       | <b>2020</b>        | <b>2019</b>        |
|--------------------|-------|--------------------|--------------------|
| Total Annual Flow  | (mg)  | 4,152              | 5,658              |
| Minimum Day        | (mgd) | 8.819 (Oct. 2019)  | 8.948 (Jul. 2018)  |
| Maximum Day        | (mgd) | 30.923 (Feb. 2020) | 38.259 (Feb. 2019) |
| Annual Average Day | (mgd) | 11.879             | 15.501             |

Note: These annual flow numbers include septage/leachate received and internal facility flows.

- A private exchange contract with Chesterfield County has been signed to secure total nitrogen credit needs through 2024.
- Authority Trust Engineer (Hazen) completed a Preliminary Engineering Report (PER) and a Value Engineering Report (VER) for a Enhanced Nutrient Removal Upgrade.
- With the assistance of the Authority Trust Engineer (Hazen) and lobbying group (McGuireWoods and Aqualaw), the SCWWA developed and submitted a Water Quality Improvement Fund (WQIF) grant application to the Department of Environmental Quality. The Authority requested enhanced funding based on the stress level of its Participating Jurisdictions.
- Continued to provide 24/7 treatment of wastewater during the ongoing Covid-19 crisis while following the Commonwealth of Virginia mandates.
- Kept staff updated on all Covid-19 requirements and provided the appropriate personal protective equipment (PPE).
- Added a personnel policy to address pandemics similar to Covid-19.

### **Authority Highlights: (Continued)**

- Several process and facility improvements were performed during FY2020. The following were reviewed and approved by the Board of Directors in the FY2020 budget.
  - The Caustic/Bisulfite controls were split out to their own Programmable Logic Computer (PLC) and the upgrade of the 24-year-old Blower PLC (PLC3) was started.
  - Generator and Utility Power protective relays were upgraded to improve reliability and safety.
  - The primary sludge line and thickened waste activated sludge line were split out to resolve a pressure issue.
  - Alum feed pumps were upgraded to peristaltic pumps.
  - Scum pot air compressors (20+ years old) were upgraded to new rotary lobe compressors to improve efficiency and reliability.
  - An old Flygt mixing pump, the NPW booster pump, and the Muffin Monster comminutors were replaced.
  - Additional racks and cabinets were purchased for the warehouse. The new barcode software that works with our inventory system was purchased. Additional grading and paving were also completed around the warehouse to improve access.
  - Several old vehicles were replaced, and a new dump bed trailer was purchased.
  - Several areas were rehabilitated and painted. These include Pump Building 2, Headworks, and the lime silos. The administration office floors were replaced.
  - Grating for the aeration tanks was upgraded to allow for equipment to access these areas.

### **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.

The Commonwealth of Virginia posted its final Chesapeake Bay TMDL Phase III Watershed Implementation Plan (WIP) in August 2019. One initiative of the plan is to achieve additional nutrient reductions from significant municipal treatment facilities that have not yet upgraded to achieve 4 mg/L of Total Nitrogen (TN) and 0.3 mg/L of Total Phosphorus (TP). Another part of the plan is to include a secondary "floating" Waste Load Allocation (WLA) for significant municipal facilities. The floating WLA will be based on the flow treated by the facility each year instead of the flow capacity of the facility. The WLA based on the facility flow capacity will remain as a "primary" WLA but the facility will be required to meet the lesser of the primary or the floating allocation. These changes can have impacts on the availability of nutrient credits.

## **Authority Highlights: (Continued)**

### **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 Poore 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 advertised for Biosolids Disposal Services in 2018 and resulted in a 3-year contract with Nutri-Blend Inc. For FY2020, minimal biosolids have been maintained onsite. Nutri-Blend routinely hauls biosolids Monday – Friday depending on the weather. There have been instances where there have been large amounts of rain when they have requested to haul on the weekends. They have successfully hauled biosolids offsite within the 30-day contract requirement.

### **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 2019 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, Petersburg, Virginia 23803, telephone (804) 590-1145.

**- Financial Statements -**

# SOUTH CENTRAL WASTEWATER AUTHORITY

## Statement of Net Position

June 30, 2020

(With Comparative Totals for the Prior Year)

|  | <u>2020</u>          | <u>2019</u>          |
|--|----------------------|----------------------|
| <b>Assets</b>                                |                      |                      |
| <b>Current Assets</b>                        |                      |                      |
| Cash and cash equivalents                    | \$ 5,075,367         | \$ 5,614,066         |
| Cash and cash equivalents - Board designated | 10,474,710           | 7,426,934            |
| Accounts receivable                          | 56,055               | 62,214               |
| Inventory                                    | 787,928              | 753,246              |
| Prepaid expenses                             | 48,376               | 49,217               |
| Total Current Assets                         | \$ <u>16,442,436</u> | \$ <u>13,905,677</u> |
| <b>Noncurrent Assets</b>                     |                      |                      |
| Capital Assets:                              |                      |                      |
| Land and land rights                         | \$ 92,968            | \$ 92,968            |
| Sewer system                                 | 35,565,964           | 34,919,518           |
| Plant machinery                              | 7,323,263            | 7,027,662            |
| Equipment and vehicles                       | 2,545,521            | 2,527,576            |
| Accumulated depreciation                     | <u>(28,582,501)</u>  | <u>(27,836,397)</u>  |
| Sub-total net capital assets                 | \$ 16,945,215        | \$ 16,731,327        |
| Construction in progress                     | <u>-</u>             | <u>831,140</u>       |
| Total net capital assets                     | \$ <u>16,945,215</u> | \$ <u>17,562,467</u> |
| Total Noncurrent Assets                      | \$ <u>16,945,215</u> | \$ <u>17,562,467</u> |
| Total Assets                                 | \$ <u>33,387,651</u> | \$ <u>31,468,144</u> |
| <b>Deferred Outflows of Resources</b>        |                      |                      |
| Pension related items                        | \$ 199,557           | \$ 104,540           |
| OPEB related items                           | <u>34,594</u>        | <u>20,958</u>        |
| Total Deferred Outflows of Resources         | \$ <u>234,151</u>    | \$ <u>125,498</u>    |

## SOUTH CENTRAL WASTEWATER AUTHORITY

### Statement of Net Position

June 30, 2020 (continued)

(With Comparative Totals for the Prior Year)

|   | <u>2020</u>                 | <u>2019</u>                 |
|---|-----------------------------|-----------------------------|
| <b>Liabilities</b>                          |                             |                             |
| <b>Current Liabilities</b>                  |                             |                             |
| Accounts payable and other accrued expenses | \$ 168,680                  | \$ 137,673                  |
| Refunds due to member localities            | <u>69,708</u>               | <u>586,821</u>              |
| Total Current Liabilities                   | \$ <u>238,388</u>           | \$ <u>724,494</u>           |
| <b>Noncurrent Liabilities</b>               |                             |                             |
| Net OPEB liabilities                        | \$ 229,861                  | \$ 215,101                  |
| Net pension liability                       | 201,913                     | 81,482                      |
| Compensated absences                        | <u>247,612</u>              | <u>219,651</u>              |
| Total Noncurrent Liabilities                | \$ <u>679,386</u>           | \$ <u>516,234</u>           |
| Total Liabilities                           | \$ <u>917,774</u>           | \$ <u>1,240,728</u>         |
| <b>Deferred Inflows of Resources</b>        |                             |                             |
| Pension related items                       | \$ 91,843                   | \$ 155,335                  |
| OPEB related items                          | <u>56,272</u>               | <u>73,071</u>               |
| Total Deferred Inflows of Resources         | \$ <u>148,115</u>           | \$ <u>228,406</u>           |
| <b>Net Position</b>                         |                             |                             |
| Investment in capital assets                | \$ 16,945,215               | \$ 17,562,467               |
| Unrestricted                                | <u>15,610,698</u>           | <u>12,562,041</u>           |
| Total Net Position                          | \$ <u><u>32,555,913</u></u> | \$ <u><u>30,124,508</u></u> |

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



## SOUTH CENTRAL WASTEWATER AUTHORITY

### Statement of Revenues, Expenses and Changes in Net Position Year Ended June 30, 2020 (With Comparative Totals for the Prior Year)

|   | <u>2020</u>                 | <u>2019</u>                 |
|---|-----------------------------|-----------------------------|
| <b>Operating Revenues</b>               |                             |                             |
| Charges for services                    | \$ 8,389,991                | \$ 7,612,279                |
| Septage and miscellaneous               | <u>766,135</u>              | <u>1,092,108</u>            |
| Total Operating Revenues                | <u>\$ 9,156,126</u>         | <u>\$ 8,704,387</u>         |
| <b>Operating Expenses</b>               |                             |                             |
| Operating and maintenance:              |                             |                             |
| Salaries                                | \$ 1,921,241                | \$ 1,825,302                |
| Employee benefits                       | 725,969                     | 624,441                     |
| Contractual services                    | 569,239                     | 379,388                     |
| Chemicals                               | 526,043                     | 567,251                     |
| Materials and supplies                  | 624,338                     | 374,607                     |
| Sludge disposal                         | 301,256                     | 385,682                     |
| Other charges                           | 597,195                     | 600,573                     |
| Nutrient credit purchases               | 471,552                     | 466,164                     |
| Depreciation                            | <u>1,195,209</u>            | <u>1,128,870</u>            |
| Total Operating Expenses                | <u>\$ 6,932,042</u>         | <u>\$ 6,352,278</u>         |
| Net Operating Income (Loss)             | <u>\$ 2,224,084</u>         | <u>\$ 2,352,109</u>         |
| <b>Nonoperating Revenues (Expenses)</b> |                             |                             |
| Interest income                         | \$ 123,113                  | \$ 36,361                   |
| Litigation proceeds                     | 130,070                     | 21,561                      |
| Other revenue (expense)                 | 2,712                       | 1,030                       |
| Abandoned project costs                 | -                           | (1,885,556)                 |
| Loss on disposal of equipment           | <u>(48,574)</u>             | <u>(10,606)</u>             |
| Total Nonoperating Revenues (Expenses)  | <u>\$ 207,321</u>           | <u>\$ (1,837,210)</u>       |
| Change in net position                  | \$ 2,431,405                | \$ 514,899                  |
| Net position, beginning of year         | <u>30,124,508</u>           | <u>29,609,609</u>           |
| Net position, end of year               | <u><u>\$ 32,555,913</u></u> | <u><u>\$ 30,124,508</u></u> |

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

# SOUTH CENTRAL WASTEWATER AUTHORITY

## Statement of Cash Flows Year Ended June 30, 2020 (With Comparative Totals for the Prior Year)

|  | <u>2020</u>                 | <u>2019</u>                 |
|--|-----------------------------|-----------------------------|
| <b>Cash flows from operating activities:</b>   |                             |                             |
| Receipts from customers and users  | \$ 8,645,172                | \$ 9,375,914                |
| Payments to suppliers and vendors  | (3,170,947)                 | (3,117,482)                 |
| Payments to and on behalf of employees   | <u>(2,673,002)</u>          | <u>(2,621,410)</u>          |
| Net cash provided by (used for) operating activities   | <u>\$ 2,801,223</u>         | <u>\$ 3,637,022</u>         |
| <b>Cash flows from capital and related financing activities:</b>   |                             |                             |
| Acquisition of plant and equipment   | \$ (551,441)                | \$ (1,859,849)              |
| Proceeds from sale of equipment  | <u>3,400</u>                | <u>-</u>                    |
| Net cash provided by (used for) capital and related financing activities                                     | <u>\$ (548,041)</u>         | <u>\$ (1,859,849)</u>       |
| <b>Cash flows from noncapital financing activities:</b>  |                             |                             |
| Litigation proceeds  | \$ 130,070                  | \$ 21,561                   |
| Other revenue (expense)  | <u>2,712</u>                | <u>1,030</u>                |
| Net cash provided by (used for) noncapital financing activities  | <u>\$ 132,782</u>           | <u>\$ 22,591</u>            |
| <b>Cash flows from investing activities:</b>   |                             |                             |
| Interest received  | <u>\$ 123,113</u>           | <u>\$ 36,361</u>            |
| Net cash provided by (used for) investing activities   | <u>\$ 123,113</u>           | <u>\$ 36,361</u>            |
| Net increase (decrease) in cash and cash equivalents   | <u>\$ 2,509,077</u>         | <u>\$ 1,836,125</u>         |
| Cash and cash equivalents at beginning of year   | <u>\$ 13,041,000</u>        | <u>\$ 11,204,875</u>        |
| Cash and cash equivalents at end of year   | <u><u>\$ 15,550,077</u></u> | <u><u>\$ 13,041,000</u></u> |
| Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:           |                             |                             |
| Operating income (loss)  | \$ 2,224,084                | \$ 2,352,109                |
| Adjustments to reconcile operating income (loss) to net cash provided by (used for) operating activities:    |                             |                             |
| Depreciation   | 1,195,209                   | 1,128,870                   |
| Changes in operating assets, deferred outflows of resources, liabilities, and deferred inflows of resources: |                             |                             |
| (Increase) decrease in receivables   | 6,159                       | 84,706                      |
| (Increase) decrease in inventories   | (34,682)                    | (88,912)                    |
| (Increase) decrease in prepaid expenses  | 841                         | (49,217)                    |
| Increase (decrease) in operating accounts payable and accrued expenses                                       | (47,483)                    | (205,688)                   |
| Increase (decrease) in refunds due member localities   | (517,113)                   | 586,821                     |
| Increase (decrease) in compensated absences  | 27,961                      | (3,605)                     |
| Increase (decrease) in net pension liability   | 120,431                     | (23,549)                    |
| (Increase) decrease in pension deferred outflow of resources   | (95,017)                    | 14,934                      |
| (Increase) decrease in OPEB deferred outflow of resources  | (13,636)                    | (11,899)                    |
| Increase (decrease) in pension deferred inflow of resources  | (63,492)                    | (148,599)                   |
| Increase (decrease) in OPEB deferred inflow of resources   | (16,799)                    | 52,559                      |
| Increase (decrease) in OPEB liabilities  | <u>14,760</u>               | <u>(51,508)</u>             |
| Net cash provided by (used for) operating activities   | <u><u>\$ 2,801,223</u></u>  | <u><u>\$ 3,637,022</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, 2020

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

The Wastewater Treatment Plant was originally constructed in the mid-1950s as a primary treatment facility with a rated capacity of 14 mgd. The treatment plant was owned and operated by the City of Petersburg with flows originating from the Cities of Petersburg and Colonial Heights and the Counties of Chesterfield, Dinwiddie, and Prince George. The treated effluent from the SCWWA Wastewater Treatment Plant discharges to the Appomattox River, a tributary of the James River, which is a major watershed of the Chesapeake Bay. In the 1970s the plant was expanded to include secondary treatment and was rerated to 15 mgd. In May of 1987, due to difficulties consistently meeting its discharge permit, the Commonwealth of Virginia State Water Control Board issued a Consent Decree. The Consent Decree outlined a Scope of Work that included examinations of the system.

- Phase 1 Evaluation
  - Treatment plant's capability to comply with the current National Pollutant Discharge Elimination System (NPDES)
  - Capital improvements to or changes in operating procedures of the treatment plant and repairs to the tributary sewage systems which may be necessary to meet the present NPDES permit limits
- Phase 2 Evaluation
  - Capability of the treatment plant to comply with anticipated future NPDES permit limitations
  - Capability of the treatment plant in meeting future community wastewater treatment needs
  - Capital improvements to or changes in operating procedures of the treatment plant which may be necessary to comply with anticipated future NPDES permit limitations or future community wastewater treatment needs

In January 1987, Wiley and Wilson was contracted to perform the evaluations outlined in the Consent Decree. Wiley and Wilson provided a Phase 1 report in June 1987 outlining facility improvements that were necessary to meet the current NPDES permit limits. The Phase 2 study report was completed in May 1988 and outlined additional improvements including expansion from 15 mgd to 20 mgd. In July 1988 Wiley and Wilson was contracted to provide design of facilities outlined in the Phase 1 and 2 reports. A construction contract for Priority One improvements, needed to meet NPDES permit limits, was awarded in February 1990. Construction included a new laboratory building, new final clarifier, new sludge dewatering facilities, dechlorination facility, odor control systems, new pumps and grinders, and rehabilitation to some of the current systems. The Authority was required to have this project substantially complete by February 1992.

Engineering proposals for Priority Two work, related to future needs and expansion of the treatment plant, were solicited in March 1991. In May 1991, the Authority selected Hazen and Sawyer Engineers, Inc. as engineering consultants for this work. Priority Two work included construction of degritting and primary settling tanks, new aeration tanks and raise current tankage, new chlorine contact tanks, and removal of the outdated heat treatment system, and replacement with belt thickeners/ belt dewatering with lime stabilization for solids. On July 2, 1996 the Cities of Petersburg (52.5%) and Colonial Heights (20%) and the Counties of Chesterfield (10%), Dinwiddie (10%), and Prince George (7.5%) formed the South Central Wastewater Authority. The South Central Wastewater Authority (SCWWA) took over ownership and operation of the existing City of Petersburg Wastewater Treatment Plant.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 1 – ORGANIZATION AND NATURE OF BUSINESS: (CONTINUED)**

Since 1996, the SCWWA has owned and operated the wastewater treatment facility. In 1999, the facility was rerated from 20 mgd to 23 mgd with a peak flow of 52.6 mgd. The treatment facility is a conventional secondary wastewater treatment plant with enhanced biological phosphorus removal and provides preliminary, primary, and secondary treatment for biological oxygen demand removal. Solids handling facilities include primary sludge and scum handling, return and waste activated sludge pumping, waste activated sludge gravity belt thickening, combined primary/secondary liquid sludge storage, belt filter press mechanical dewatering, alkaline (lime) biosolids Class B stabilization, and covered biosolids storage. Ancillary facilities include septage receiving, filtrate and plant drain pump stations, and odor control.

In 2006, the SCWWA joined the Virginia Nutrient Credit Exchange Association (The Nutrient Exchange). The Nutrient Exchange was formed to coordinate and facilitate nutrient credit trading among its members to help improve water quality efficiently and cost-effectively. Through The Nutrient Exchange, the SCWWA has maintained regulatory nutrient wasteload compliance.

In 2009, the SCWWA intended to upgrade the facility to remove excess Total Nitrogen and Total Phosphorus to meet the Chesapeake Bay 2010 Total Maximum Daily Load (TMDL). The Authority contracted with O'Brien and Gere Engineers Inc. (OBG) to evaluate and design upgrades to the treatment facility to achieve the nutrient wasteload allocations for 23-MGD average daily flow (evaluating what additional hydraulic improvements may be necessary to meet the TMDL) and update and renovate other facilities where identified by the Authority. OBG completed the design in 2009 and in 2011 CH2M Hill was contracted to Value Engineer the design. In 2012, the SCWWA Board of Directors decided to delay the construction of the Nutrient Upgrade.

In response to Virginia's 2025 WIP III goals, the SCWWA staff and two board members met with the Virginia Secretary of Natural Resources and the Director of the Virginia Department of Environmental Quality to discuss options for funding a nutrient upgrade project. Following this meeting the SCWWA contracted with consultant engineers Hazen and Sawyer to develop a Preliminary Engineering Report (PER) and assist in the Water Quality Improvement Fund (WQIF) grant application. The PER and a Value Engineering Report (VE) were completed and the WQIF grant application was delivered to DEQ.

### **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.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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

#### **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.

The financial statements include a Management's Discussion and Analysis (MD&A) section providing an analysis of the Authority's overall financial position and results of operations.

#### **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
- Required Supplementary Information
  - Schedule of Changes in Net Pension (Asset) Liability and Related Ratios
  - Schedule of Employer Contributions - Pension
  - Notes to Required Supplementary Information - Pension
  - Schedule of Changes in Total OPEB Liability (Asset) and Related Ratios - Health Insurance
  - Notes to Required Supplementary Information - Health Insurance
  - Schedule of Authority's Share of Net OPEB Liability - Group Life Insurance Plan
  - Schedule of Employer Contributions - Group Life Insurance Plan
  - Notes to Required Supplementary Information - Group Life Insurance Plan

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

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.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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

#### **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.

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

|                        |          |
|------------------------|----------|
| Sewer system           | 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.



## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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

#### **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) until then. The Authority has one item that qualifies for reporting in this category. It is comprised of certain items related to the measurement of the net pension liability and net OPEB liabilities and contributions to the pension and OPEB plans made during the current year and subsequent to the net pension liability and net OPEB liability measurement date. For more detailed information on these items, reference the related notes.

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. The Authority has one type of item that qualifies for reporting in this category. Certain items related to the measurement of the net pension liability and net OPEB liabilities are reported as deferred inflows of resources. For more detailed information on these items, reference the related notes.

#### **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 liability, 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.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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

#### **N. Other Postemployment Benefits (OPEB)**

##### *Group Life Insurance*

For purposes of measuring the net GLI Plan OPEB liability, deferred outflows of resources and deferred inflows of resources related to the GLI OPEB, and GLI OPEB expense, information about the fiduciary net position of the VRS GLI Plan OPEB and the additions to/deductions from the VRS GLI OPEB's net fiduciary position have been determined on the same basis as they were reported by VRS. In addition, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

#### **O. 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.

#### **P. 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 local governments and other public bodies 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 that has received at least two of the following ratings: P-1 by Moody's Investors Service, Inc.; A-1 by Standard and Poor's; or F1 by Fitch Ratings, Inc. (Section 2.2-4502), banker's acceptances, repurchase agreements, and the State Treasurer's Local Government Investment Pool (LGIP).

The Authority has not implemented a formal investment policy.



## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

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

#### **Credit Risk of Debt Securities:**

The Authority's rated debt investments as of June 30, 2020 were rated by Standard & Poor's and the ratings are presented below using the Standard & Poor's rating scale.

| <b>Authority's Rated Debt Investments' Values</b> |                                    |
|---|------------------------------------|
| <b><u>Rated Debt Investments</u></b>              | <b><u>Fair Quality Ratings</u></b> |
|   | <b><u>AAAm</u></b>                 |
| Local Government Investment Pool                  | \$ <u>8,083,474</u>                |
| Total   | \$ <u><u>8,083,474</u></u>         |

#### **Interest Rate Risk:**

| <b>Investment Maturities (in years)</b> |                            |                                |
|---|----------------------------|--------------------------------|
|   | <b><u>Fair Value</u></b>   | <b><u>Less Than 1 Year</u></b> |
| Local Government Investment Pool        | \$ <u>8,083,474</u>        | \$ <u>8,083,474</u>            |
|   | \$ <u><u>8,083,474</u></u> | \$ <u><u>8,083,474</u></u>     |

#### **External Investment Pool:**

The value of the positions in the external investment pool (Local Government Investment Pool) is the same as the value of the pool shares. As LGIP is not SEC registered, regulatory oversight of the pool rests with the Virginia State Treasury. LGIP is an amortized cost basis portfolio. There are no withdrawal limitations or restrictions imposed on participants.

#### **Concentration of Credit Risk:**

The Authority's 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.

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

### **NOTE 4 – CAPITAL ASSETS:**

A summary of the Authority's capital assets and the changes therein for the year ended June 30, 2020, follows:

|  | <b><u>Beginning<br/>Balance</u></b> | <b><u>Increases</u></b> | <b><u>Decreases</u></b> | <b><u>Ending<br/>Balance</u></b> |
|--|-------------------------------------|-------------------------|-------------------------|----------------------------------|
| Capital assets not being depreciated:        |                                     |                         |                         |                                  |
| Land and land rights                         | \$ 92,968                           | \$ -                    | \$ -                    | \$ 92,968                        |
| Construction in progress                     | 831,140                             | 271,094                 | 1,102,234               | -                                |
| Total capital assets not being depreciated   | <u>\$ 924,108</u>                   | <u>\$ 271,094</u>       | <u>\$ 1,102,234</u>     | <u>\$ 92,968</u>                 |
| Other capital assets, being depreciated:     |                                     |                         |                         |                                  |
| Sewer system                                 | \$ 34,919,518                       | \$ 1,027,982            | \$ 381,536              | \$ 35,565,964                    |
| Plant machinery                              | 7,027,662                           | 321,827                 | 26,226                  | 7,323,263                        |
| Equipment and vehicles                       | 2,527,576                           | 111,262                 | 93,317                  | 2,545,521                        |
| Total other capital assets being depreciated | <u>\$ 44,474,756</u>                | <u>\$ 1,461,071</u>     | <u>\$ 501,079</u>       | <u>\$ 45,434,748</u>             |
| Accumulated depreciation:                    |                                     |                         |                         |                                  |
| Sewer system                                 | \$ (20,341,453)                     | \$ (859,212)            | \$ (371,245)            | \$ (20,829,420)                  |
| Plant machinery                              | (5,395,339)                         | (262,333)               | (11,365)                | (5,646,307)                      |
| Equipment and vehicles                       | (2,099,605)                         | (73,664)                | (66,495)                | (2,106,774)                      |
| Total accumulated depreciation               | <u>\$ (27,836,397)</u>              | <u>\$ (1,195,209)</u>   | <u>\$ (449,105)</u>     | <u>\$ (28,582,501)</u>           |
| Other capital assets being depreciated, net  | <u>\$ 16,638,359</u>                | <u>\$ 265,862</u>       | <u>\$ 51,974</u>        | <u>\$ 16,852,247</u>             |
| Capital assets, net                          | <u>\$ 17,562,467</u>                | <u>\$ 536,956</u>       | <u>\$ 1,154,208</u>     | <u>\$ 16,945,215</u>             |

Depreciation expense for the fiscal year totaled \$1,195,209.

### **NOTE 5 – LONG-TERM OBLIGATIONS:**

#### **Changes in Long-Term Obligations:**

The following is a summary of long-term obligations transactions for the year ended June 30, 2020:

|                       | <b><u>Balance<br/>July 1,<br/>2019</u></b> | <b><u>Issuances</u></b> | <b><u>Retirements</u></b> | <b><u>Balance<br/>June 30,<br/>2020</u></b> |
|-----------------------|--|-------------------------|---------------------------|---|
| Net OPEB liability    | \$ 215,101                                 | \$ 52,381               | \$ (37,621)               | \$ 229,861                                  |
| Compensated absences  | \$ 219,651                                 | \$ 27,961               | \$ -                      | \$ 247,612                                  |
| Net pension liability | \$ 81,482                                  | \$ 633,363              | \$ (512,932)              | \$ 201,913                                  |
| Totals                | <u>\$ 516,234</u>                          | <u>\$ 713,705</u>       | <u>\$ (550,553)</u>       | <u>\$ 679,386</u>                           |

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 6 – 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.

#### ***Benefit Structures***

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, as detailed below.

- a. Employees hired before July 1, 2010, vested as of January 1, 2013, and have not taken a refund, are covered under Plan 1, a defined benefit plan. Non-hazardous duty employees are eligible for an unreduced retirement benefit beginning at age 65 with at least 5 years of service credit or age 50 with at least 30 years of service credit. Non-hazardous duty employees may retire with a reduced benefit as early as age 55 with at least 5 years of service credit or age 50 with at least 10 years of service credit.
- b. Employees hired 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 are covered under Plan 2, a defined benefit plan. Non-hazardous duty employees are eligible for an unreduced benefit beginning at their normal social security retirement age with at least 5 years of service credit or when the sum of their age plus service credit equals 90. Non-hazardous duty employees may retire with a reduced benefit as early as age 60 with at least 5 years of service credit.
- c. Non-hazardous duty employees hired on or after January 1, 2014 are covered by the Hybrid Plan combining the features of a defined benefit plan and a defined contribution plan. Plan 1 and Plan 2 members also had the option of opting into this plan during the election window held January 1 – April 30, 2014 with an effective date of July 1, 2014. Employees covered by this plan are eligible for an unreduced benefit beginning at their normal social security retirement age with at least 5 years of service credit, or when the sum of their age plus service credit equals 90. Employees may retire with a reduced benefit as early as age 60 with at least 5 years of service credit. For the defined contribution component, members are eligible to receive distributions upon leaving employment, subject to restrictions.

#### ***Average Final Compensation and Service Retirement Multiplier***

The VRS defined benefit is a lifetime monthly benefit based on a retirement multiplier as a percentage of the employee's average final compensation multiplied by the employee's total service credit. Under Plan 1, average final compensation is the average of the employee's 36 consecutive months of highest compensation and the multiplier is 1.70% for non-hazardous duty employees. Under Plan 2, average final compensation is the average of the employee's 60 consecutive months of highest compensation and the retirement multiplier is 1.65% for non-hazardous duty employees. Under the Hybrid Plan, average final compensation is the average of the employee's 60 consecutive months of highest compensation and the multiplier is 1.00%. 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.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 6 – PENSION PLAN: (CONTINUED)**

#### ***Cost-of-Living Adjustment (COLA) in Retirement and Death and Disability Benefits***

Retirees with an unreduced benefit or with a reduced benefit with at least 20 years of service credit are eligible for an annual COLA beginning July 1 after one full calendar year from the retirement date. Retirees with a reduced benefit and who have less than 20 years of service credit are eligible for an annual COLA beginning on July 1 after one calendar year following the unreduced retirement eligibility date. Under Plan 1, the COLA cannot exceed 5.00%. Under Plan 2 and the Hybrid Plan, the COLA cannot exceed 3.00%. The VRS also provides death and disability benefits. Title 51.1 of the Code of Virginia as amended, assigns the authority to establish and amend benefit provisions to the General Assembly of Virginia.

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

As of the June 30, 2018 actuarial valuation, the following employees were covered by the benefit terms of the pension plan:

|  | <b><u>Number</u></b> |
|--|----------------------|
| Inactive members or their beneficiaries currently receiving benefits | 15                   |
| Inactive members:  |                      |
| Vested inactive members  | 4                    |
| Non-vested inactive members  | 13                   |
| Long-term disability (LTD)   | -                    |
| Inactive members active elsewhere in VRS                             | 10                   |
| Total inactive members   | 27                   |
| Active members   | 33                   |
| 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.

The Authority's contractually required employer contribution rate for the year ended June 30, 2020 was 5.49% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017.

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 \$89,508 and \$89,435 for the years ended June 30, 2020 and June 30, 2019, respectively.

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

The net pension liability (asset) is calculated separately for each employer and represents that particular employer's total pension liability (asset) determined in accordance with GASB Statement No. 68, less that employer's fiduciary net position. For the Authority, the net pension liability (asset) was measured as of June 30, 2019. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2018 rolled forward to the measurement date of June 30, 2019.

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

### **NOTE 6 – PENSION PLAN: (CONTINUED)**

#### ***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, 2018, 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, 2019.

|                                       |  |
|---------------------------------------|--|
| Inflation                             | 2.5%   |
| Salary increases, including inflation | 3.5% – 5.35%   |
| Investment rate of return             | 6.75%, net of pension plan investment expenses, 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 6.75%. However, since the difference was minimal, and a more conservative 6.75% 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 6.75% to simplify preparation of pension liabilities.

Mortality rates:

All Others (Non 10 Largest) – Non-Hazardous Duty: 15% of deaths are assumed to be service related

Pre-Retirement:

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates at ages 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

Post-Retirement:

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

Post-Disablement:

RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

All Others (Non 10 Largest) – Non-Hazardous Duty:

|   |   |
|---|---|
| Mortality Rates (pre-retirement, post-retirement healthy, and disabled) | Updated to a more current mortality table - RP-2014 projected to 2020                           |
| Retirement Rates  | Lowered rates at older ages and changed final retirement from 70 to 75                          |
| Withdrawal Rates  | Adjusted rates to better fit experience at each year age and service through 9 years of service |
| Disability Rates  | Lowered rates   |
| Salary Scale  | No change   |
| Line of Duty Disability   | Increased rate from 14.00% to 15.00%  |
| Discount Rate   | Decreased rate from 7.00% to 6.75%  |

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

### **NOTE 6 – 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<br/>Allocation</b> | <b>Arithmetic<br/>Long-term<br/>Expected<br/>Rate of Return</b> | <b>Weighted<br/>Average<br/>Long-term<br/>Expected<br/>Rate of Return</b> |
|--------------------------------------|------------------------------|---|---|
| Public Equity                        | 34.00%                       | 5.61%   | 1.91%   |
| Fixed Income                         | 15.00%                       | 0.88%   | 0.13%   |
| Credit Strategies                    | 14.00%                       | 5.13%   | 0.72%   |
| Real Assets                          | 14.00%                       | 5.27%   | 0.74%   |
| Private Equity                       | 14.00%                       | 8.77%   | 1.23%   |
| MAPS - Multi-Asset Public Strategies | 6.00%                        | 3.52%   | 0.21%   |
| PIP - Private Investment Partnership | 3.00%                        | 6.29%   | 0.19%   |
| Total                                | 100.00%                      |   | 5.13%   |
|                                      |                              | Inflation   | 2.50%   |
|                                      |                              | Expected arithmetic nominal return*                             | 7.63%   |

\* The above allocation provides a one-year return of 7.63%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40th percentile of expected long-term results of the VRS fund asset allocation.

#### ***Discount Rate***

The discount rate used to measure the total pension liability was 6.75%. 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. Consistent with the phased-in funding provided by the General Assembly for state and teacher employer contributions; the Authority was also provided with an opportunity to use an alternative employer contribution rate. For the year ended June 30, 2019, the alternate rate was the employer contribution rate used in FY 2012 or 100% of the actuarially determined employer contribution rate from the June 30, 2017 actuarial valuations, whichever was greater. From July 1, 2019 on, participating employers are assumed to continue 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.

# SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

## **NOTE 6 – PENSION PLAN: (CONTINUED)**

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

|  | Increase (Decrease)                  |  |  |
|--|--------------------------------------|--|--|
|  | Total<br>Pension<br>Liability<br>(a) | Plan<br>Fiduciary<br>Net Position<br>(b) | Net<br>Pension<br>Liability (Asset)<br>(a) - (b) |
| Balances at June 30, 2018  | \$ 4,459,915                         | \$ 4,378,433                             | \$ 81,482  |
| Changes for the year:  |                                      |  |  |
| Service cost   | \$ 177,128                           | \$ -                                     | \$ 177,128                                       |
| Interest   | 307,432                              | -  | 307,432  |
| Changes in assumptions   | 145,795                              | -  | 145,795  |
| Differences between expected<br>and actual experience            | (42,917)                             | -  | (42,917)   |
| Contributions - employer   | -                                    | 89,420                                   | (89,420)   |
| Contributions - employee   | -                                    | 83,449                                   | (83,449)   |
| Net investment income  | -                                    | 297,146                                  | (297,146)  |
| Benefit payments, including refunds<br>of employee contributions | (136,054)                            | (136,054)                                | -  |
| Administrative expenses  | -                                    | (2,820)                                  | 2,820  |
| Other changes  | -                                    | (188)                                    | 188  |
| Net changes  | \$ 451,384                           | \$ 330,953                               | \$ 120,431                                       |
| Balances at June 30, 2019  | \$ 4,911,299                         | \$ 4,709,386                             | \$ 201,913                                       |

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

The following presents the net pension liability of the Authority using the discount rate of 6.75%, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (5.75%) or one percentage point higher (7.75%) than the current rate:

|   | Rate       |            |              |
|---|------------|------------|--------------|
|   | (5.75%)    | (6.75%)    | (7.75%)      |
| South Central Wastewater Authority<br>Net Pension Liability (Asset) | \$ 851,951 | \$ 201,913 | \$ (315,389) |



## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 6 – PENSION PLAN: (CONTINUED)**

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

For the year ended June 30, 2020, the Authority recognized pension expense of \$51,415. At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

|  | <u>Deferred Outflows<br/>of Resources</u> | <u>Deferred Inflows<br/>of Resources</u> |
|--|---|--|
| Differences between expected and actual experience                               | \$ 8,704                                  | \$ 39,374                                |
| Change of assumptions  | 101,345                                   | 11,348                                   |
| Net difference between projected and actual earnings on pension plan investments | -   | 41,121                                   |
| Employer contributions subsequent to the measurement date                        | <u>89,508</u>                             | <u>-</u>                                 |
| Total  | \$ <u>199,557</u>                         | \$ <u>91,843</u>                         |

\$89,508 reported as deferred outflows of resources related to pensions resulting from the Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the fiscal year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future reporting periods as follows:

| <u>Year ended June 30</u> |           |
|---------------------------|-----------|
| 2021                      | \$ 13,607 |
| 2022                      | (5,078)   |
| 2023                      | 7,570     |
| 2024                      | 2,107     |
| 2025                      | -         |
| Thereafter                | -         |

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

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at <http://www.varetire.org/Pdf/Publications/2019-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, 2020 (Continued)

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### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS:**

#### **Health Insurance**

##### **Plan Description**

In addition to the pension benefits described in Note 6, the Authority administers a single-employer defined benefit healthcare plan. The plan provides postemployment health care benefits to all eligible permanent employees who meet the requirements under the Authority's pension plans. The plan does not issue a publicly available financial report.

##### **Benefits Provided**

Participants who are eligible to retire from the VRS pension plan are allowed access to the plan until they reach age 65. Retirees pay the blended (employees and retirees) published rate, however as they are older than the typical employee (and thus more expensive) there is a cost to this right to purchase insurance at the blended rate.

VRS retirement eligibility is age 50 with 10 years of service or age 55 with 5 years of service for employees hired prior to July 1, 2010 who were vested in the plan prior to July 1, 2013. VRS retirement eligibility is the earlier of age 60 with 5 years of service or 90 combined age and service points for other employees.

##### **Plan Membership**

At June 30, 2019 (measurement date), the following employees were covered by the benefit terms:

|                                      |                  |
|--------------------------------------|------------------|
| Total active employees with coverage | 63               |
| Total retirees without coverage      | <u>18</u>        |
| Total                                | <u><u>81</u></u> |

##### **Contributions**

The Authority does not pre-fund benefits; therefore, no assets are accumulated in a trust fund. The current funding policy is to pay benefits directly from general assets on a pay-as-you-go basis. The funding requirements are established and may be amended by the Authority. The amount paid by the Authority for OPEB as the benefits came due during the year ended June 30, 2020 was \$0.

##### **Total OPEB Liability**

The Authority's total OPEB liability was measured as of June 30, 2019.

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS: (CONTINUED)**

#### **Health Insurance: (Continued)**

##### **Actuarial Assumptions**

The total OPEB liability in the July 1, 2019 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

|                  |  |
|------------------|--|
| Inflation        | 2.50% per year as of June 30, 2019                               |
| Salary Increases | 3.5% -5.35% including inflation                                  |
| Discount Rate    | 3.13% for accounting and funding disclosures as of June 30, 2019 |
|                  | 3.62% for accounting and funding disclosures as of June 30, 2018 |

##### **Discount Rate**

The discount rate used to determine the liabilities under GASB 75 is based on an index rate for 20-year tax exempt general obligation municipal bonds with an average rating of AA/Aa or higher. This rate was 3.62% as of June 30, 2018 and 3.13% as of June 30, 2019.

##### **Changes in Total OPEB Liability**

|   | <u>Total OPEB Liability</u> |
|---|-----------------------------|
| Balances at June 30, 2018                         | \$ 76,101                   |
| Changes for the year:                             |                             |
| Service cost                                      | 7,258                       |
| Interest  | 2,705                       |
| Difference between expected and actual experience | (2,728)                     |
| Changes in assumptions                            | 3,488                       |
| Net changes                                       | \$ 10,723                   |
| Balances at June 30, 2019                         | \$ 86,824                   |

##### **Sensitivity of the Total OPEB Liability to Changes in the Discount Rate**

The following amounts present the total OPEB liability of the Authority, as well as what the total OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (2.13%) or one percentage point higher (4.13%) than the current discount rate:

| <u>1% Decrease</u><br><u>(2.13%)</u> | <u>Current Discount</u><br><u>Rate (3.13%)</u> | <u>1% Increase</u><br><u>(4.13%)</u> |
|--------------------------------------|--|--------------------------------------|
| \$ 94,118                            | \$ 86,824                                      | \$ 79,894                            |

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS: (CONTINUED)**

#### **Health Insurance: (Continued)**

##### **Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates**

The following presents the total OPEB liability of the Authority, as well as what the total OPEB liability would be if it were calculated using healthcare cost trend rates that are one percentage point lower (3.20%) or one percentage point higher (5.20%) than the current healthcare cost trend rates:

|    | <b>1% Decrease<br/>(3.20%)</b> | <b>Healthcare Cost<br/>Trend Rates<br/>(4.20%)</b> | <b>1% Increase<br/>(5.20%)</b> |
|----|--------------------------------|--|--------------------------------|
|    | <u>                    </u>    | <u>                    </u>                        | <u>                    </u>    |
| \$ | 75,741                         | \$ 86,824  | \$ 99,860                      |

##### **OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources**

For the year ended June 30, 2020, the Authority recognized OPEB expense in the amount of \$(9,909). At June 30, 2020, the Authority reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

|  |    | <b>Deferred Outflows<br/>of Resources</b> | <b>Deferred Inflows<br/>of Resources</b> |
|--|----|---|--|
|  |    | <u>                    </u>               | <u>                    </u>              |
| Differences between expected and actual experience | \$ | -   | \$ 38,831                                |
| Changes in assumptions                             |    | 2,790                                     | 3,398                                    |
| Total  | \$ | <u>2,790</u>                              | <u>\$ 42,229</u>                         |

Amounts reported as deferred outflows of resources and deferred inflows of resources will be recognized in OPEB expense in future reporting periods as follows:

| <b>Year Ended June 30</b> |                             |
|---------------------------|-----------------------------|
|                           | <u>                    </u> |
| 2021                      | \$ (19,872)                 |
| 2022                      | (19,871)                    |
| 2023                      | 152                         |
| 2024                      | 152                         |
| 2025                      | -                           |
| Thereafter                | -                           |

Additional disclosures on changes in total OPEB liability, related ratios, and employer contributions can be found in the required supplementary information following the notes to the financial statements.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS: (CONTINUED)**

#### **Group Life Insurance**

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

The Group Life Insurance (GLI) Plan was established pursuant to §51.1-500 et seq. of the Code of Virginia, as amended, and which provides the authority under which benefit terms are established or may be amended. All full-time, salaried permanent employees of the state agencies, teachers, and employees of participating political subdivisions are automatically covered by the VRS GLI Plan upon employment. This is a cost-sharing multiple-employer plan administered by the Virginia Retirement System (the System), along with pensions and other OPEB plans, for public employer groups in the Commonwealth of Virginia.

In addition to the Basic GLI benefit, members are also eligible to elect additional coverage for themselves as well as a spouse or dependent children through the Optional GLI Plan. For members who elect the optional group life insurance coverage, the insurer bills employers directly for the premiums. Employers deduct these premiums from members' paychecks and pay the premiums to the insurer. Since this is a separate and fully insured plan, it is not included as part of the GLI Plan OPEB.

The specific information for GLI OPEB, including eligibility, coverage and benefits is described below:

##### ***Eligible Employees***

The GLI Plan was established July 1, 1960, for state employees, teachers, and employees of political subdivisions that elect the plan. Basic GLI coverage is automatic upon employment. Coverage ends for employees who leave their position before retirement eligibility or who take a refund of their accumulated retirement member contributions and accrued interest.

##### ***Benefit Amounts***

The GLI Plan is a defined benefit plan with several components. The natural death benefit is equal to the employee's covered compensation rounded to the next highest thousand and then doubled. The accidental death benefit is double the natural death benefit. In addition to basic natural and accidental death benefits, the plan provides additional benefits provided under specific circumstances that include the following: accidental dismemberment benefit, safety belt benefit, repatriation benefit, felonious assault benefit, and accelerated death benefit option. The benefit amounts are subject to a reduction factor. The benefit amount reduces by 25% on January 1 following one calendar year of separation. The benefit amount reduces by an additional 25% on each subsequent January 1 until it reaches 25% of its original value. For covered members with at least 30 years of service credit, the minimum benefit payable was set at \$8,000 by statute in 2015. This will be increased annually based on the VRS Plan 2 cost-of-living adjustment calculation. The minimum benefit adjusted for the COLA was \$8,463 as of June 30, 2020.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS: (CONTINUED)**

#### **Group Life Insurance: (Continued)**

##### ***Contributions***

The contribution requirements for the GLI Plan are governed by §51.1-506 and §51.1-508 of the Code of Virginia, as amended, but may be impacted as a result of funding provided to state agencies and school divisions by the Virginia General Assembly. The total rate for the GLI Plan was 1.31% of covered employee compensation. This was allocated into an employee and an employer component using a 60/40 split. The employee component was 0.79% (1.31% x 60%) and the employer component was 0.52% (1.31% x 40%). Employers may elect to pay all or part of the employee contribution; however, the employer must pay all of the employer contribution. Each employer's contractually required employer contribution rate for the year ended June 30, 2020 was 0.52% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2017. The actuarially determined rate, when combined with employee contributions, was expected to finance the costs of benefits payable during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the GLI Plan from the entity were \$9,189 and \$8,958 for the years ended June 30, 2020 and June 30, 2019, respectively.

##### ***GLI OPEB Liabilities, GLI OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the GLI Plan OPEB***

At June 30, 2020, the entity reported a liability \$143,037 for its proportionate share of the Net GLI OPEB Liability. The Net GLI OPEB Liability was measured as of June 30, 2019 and the total GLI OPEB liability used to calculate the Net GLI OPEB Liability was determined by an actuarial valuation performed as of June 30, 2018 and rolled forward to the measurement date as of June 30, 2019. The covered employer's proportion of the Net GLI OPEB Liability was based on the covered employer's actuarially determined employer contributions to the GLI Plan for the year ended June 30, 2019 relative to the total of the actuarially determined employer contributions for all participating employers. At June 30, 2019, the participating employer's proportion was .00879% as compared to 0.00916% at June 30, 2018.

For the year ended June 30, 2020, the participating employer recognized GLI OPEB expense of \$3,315. Since there was a change in proportionate share between measurement dates, a portion of the GLI OPEB expense was related to deferred amounts from changes in proportion.

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS: (CONTINUED)**

#### **Group Life Insurance: (Continued)**

#### ***GLI OPEB Liabilities, GLI OPEB Expense, and Deferred Outflows of Resources and Deferred Inflows of Resources Related to the GLI Plan OPEB: (Continued)***

At June 30, 2020, the employer reported deferred outflows of resources and deferred inflows of resources related to the GLI OPEB from the following sources:

|  | <u>Deferred Outflows<br/>of Resources</u> | <u>Deferred Inflows<br/>of Resources</u> |
|--|---|--|
| Differences between expected and actual experience                                   | \$ 9,513                                  | \$ 1,856                                 |
| Net difference between projected and actual earnings on GLI OPEB program investments | -   | 2,938                                    |
| Change in assumptions  | 9,031                                     | 4,313                                    |
| Changes in proportionate share   | 4,071                                     | 4,936                                    |
| Employer contributions subsequent to the measurement date                            | <u>9,189</u>                              | <u>-</u>                                 |
| Total  | \$ <u><u>31,804</u></u>                   | \$ <u><u>14,043</u></u>                  |

\$9,189 reported as deferred outflows of resources related to the GLI OPEB resulting from the employer's contributions subsequent to the measurement date will be recognized as a reduction of the Net GLI OPEB Liability in the fiscal year ending June 30, 2021. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to the GLI OPEB will be recognized in the GLI OPEB expense in future reporting periods as follows:

| <u>Year Ended June 30</u> |        |
|---------------------------|--------|
| 2021                      | \$ 515 |
| 2022                      | 516    |
| 2023                      | 1,760  |
| 2024                      | 2,896  |
| 2025                      | 2,372  |
| Thereafter                | 513    |

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS: (CONTINUED)**

#### **Group Life Insurance: (Continued)**

##### ***Actuarial Assumptions***

The total GLI OPEB liability was based on an actuarial valuation as of June 30, 2018, 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, 2019. The assumptions include several employer groups as noted below. Salary increases and mortality rates included herein are for relevant employer groups. Information for other groups can be references in the VRS CAFR.

|  |  |
|--|--|
| Inflation                              | 2.50%  |
| Salary increases, including inflation: |  |
| Locality - General employees           | 3.50%-5.35%  |
| Investment rate of return              | 6.75%, net of investment expenses,<br>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 6.75%. However, since the difference was minimal, and a more conservative 6.75% 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 6.75% to simplify preparation of OPEB liabilities.

#### **Mortality Rates - Non-Largest Ten Locality Employers - General Employees**

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

RP-2014 Employee Rates to age 80, Healthy Annuitant Rates to 81 and older projected with scale BB to 2020; males 95% of rates; females 105% of rates.

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

RP-2014 Employee Rates to age 49, Healthy Annuitant Rates at ages 50 and older projected with scale BB to 2020; males set forward 3 years; females 1.0% increase compounded from ages 70 to 90.

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

RP-2014 Disability Mortality Rates projected with scale BB to 2020; males set forward 2 years, 110% of rates; females 125% of rates.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS: (CONTINUED)**

#### **Group Life Insurance: (Continued)**

#### ***Actuarial Assumptions: (Continued)***

#### **Mortality Rates - Non-Largest Ten Locality Employers - General Employees: (Continued)**

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

|   |  |
|---|--|
| Mortality Rates (pre-retirement, post-retirement healthy, and disabled) | Updated to a more current mortality table - RP-2014 projected to 2020                  |
| Retirement Rates  | Lowered retirement rates at older ages and extended final retirement age from 70 to 75 |
| Withdrawal Rates  | Adjusted termination rates to better fit experience at each age and service year       |
| Disability Rates  | Lowered disability rates   |
| Salary Scale  | No change  |
| Line of Duty Disability   | Increased rate from 14.00% to 15.00%   |
| Discount Rate   | Decreased rate from 7.00% to 6.75%   |

#### ***NET GLI OPEB Liability***

The net OPEB liability (NOL) for the GLI Plan represents the plan's total OPEB liability determined in accordance with GASB Statement No. 74, less the associated fiduciary net position. As of the measurement date of June 30, 2019, NOL amounts for the GLI Plan are as follows (amounts expressed in thousands):

|  |    | <b>GLI OPEB<br/>Plan</b> |
|--|----|--------------------------|
|  |    | <hr/>                    |
| Total GLI OPEB Liability   | \$ | 3,390,238                |
| Plan Fiduciary Net Position  |    | 1,762,972                |
| GLI Net OPEB Liability (Asset)   | \$ | <hr/> <hr/> 1,627,266    |
| Plan Fiduciary Net Position as a Percentage<br>of the Total GLI OPEB Liability |    | 52.00%                   |

The total GLI OPEB liability is calculated by the System's actuary, and each plan's fiduciary net position is reported in the System's financial statements. The net GLI OPEB liability is disclosed in accordance with the requirements of GASB Statement No. 74 in the System's notes to the financial statements and required supplementary information.



## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS : (CONTINUED)**

#### **Group Life Insurance: (Continued)**

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

The long-term expected rate of return on the System's 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 System's 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> |
|--------------------------------------|--------------------------|---|--|
| Public Equity                        | 34.00%                   | 5.61%   | 1.91%  |
| Fixed Income                         | 15.00%                   | 0.88%   | 0.13%  |
| Credit Strategies                    | 14.00%                   | 5.13%   | 0.72%  |
| Real Assets                          | 14.00%                   | 5.27%   | 0.74%  |
| Private Equity                       | 14.00%                   | 8.77%   | 1.23%  |
| MAPS - Multi-Asset Public Strategies | 6.00%                    | 3.52%   | 0.21%  |
| PIP - Private Investment Partnership | 3.00%                    | 6.29%   | 0.19%  |
| Total                                | 100.00%                  |   | 5.13%  |
|                                      |                          | Inflation   | 2.50%  |
|                                      |                          | Expected arithmetic nominal return*                 | 7.63%  |

\*The above allocation provides a one-year return of 7.63%. However, one-year returns do not take into account the volatility present in each of the asset classes. In setting the long-term expected return for the system, stochastic projections are employed to model future returns under various economic conditions. The results provide a range of returns over various time periods that ultimately provide a median return of 7.11%, including expected inflation of 2.50%. The VRS Board elected a long-term rate of 6.75% which is roughly at the 40<sup>th</sup> percentile of expected long-term results of the VRS fund asset allocation.

##### ***Discount Rate***

The discount rate used to measure the total GLI OPEB liability was 6.75%. The projection of cash flows used to determine the discount rate assumed that member contributions will be made per the VRS guidance 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 ended June 30, 2019, the rate contributed by the entity for the GLI OPEB will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly which was 100% of the actuarially determined contribution rate. From July 1, 2019 on, employers are assumed to continue to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the GLI OPEB's fiduciary net position was projected to be available to make all projected future benefit payments of eligible employees. Therefore, the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total GLI OPEB liability.

## SOUTH CENTRAL WASTEWATER AUTHORITY

Notes to Financial Statements  
June 30, 2020 (Continued)

### **NOTE 7 – OTHER POSTEMPLOYMENT BENEFITS PLANS: (CONTINUED)**

#### **Group Life Insurance: (Continued)**

#### ***Sensitivity of the Employer's Proportionate Share of the Net GLI OPEB Liability to Changes in the Discount Rate***

The following presents the employer's proportionate share of the net GLI OPEB liability using the discount rate of 6.75%, as well as what the employer's proportionate share of the net GLI OPEB liability would be if it were calculated using a discount rate that is one percentage point lower (5.75%) or one percentage point higher (7.75%) than the current rate:

|  | Rate        |                  |             |
|--|-------------|------------------|-------------|
|  | 1% Decrease | Current Discount | 1% Increase |
|  | (5.75%)     | (6.75%)          | (7.75%)     |
| Authority's proportionate share of the Group Life Insurance Plan |             |                  |             |
| Net OPEB Liability   | \$ 187,911  | \$ 143,037       | \$ 106,645  |

#### ***GLI Plan Fiduciary Net Position***

Detailed information about the GLI Plan's Fiduciary Net Position is available in the separately issued VRS 2019 Comprehensive Annual Financial Report (CAFR). A copy of the 2019 VRS CAFR may be downloaded from the VRS website at <http://www.varetire.org/Pdf/Publications/2019-annual-report.pdf>, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA, 23218-2500.

#### ***OPEB Aggregate Totals***

|                                       | South Central Wastewater Authority |                  |                    |              |
|---------------------------------------|------------------------------------|------------------|--------------------|--------------|
|                                       | Deferred Outflows                  | Deferred Inflows | Net OPEB Liability | OPEB Expense |
| VRS OPEB Plans:                       |                                    |                  |                    |              |
| Group Life Insurance Program (Note 7) | \$ 31,804                          | \$ 14,043        | \$ 143,037         | \$ 3,315     |
| Authority's Stand-Alone Plan (Note 7) | 2,790                              | 42,229           | 86,824             | (9,909)      |
| Totals                                | \$ 34,594                          | \$ 56,272        | \$ 229,861         | \$ (6,594)   |

### **NOTE 8 – 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.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 9 – COMPENSATED ABSENCES:**

Accumulated unpaid vacation, vested sick leave and other compensatory leave amounts are accrued when incurred. At June 30, 2020 and 2019 liabilities were as follows:

|                                    |    | <u>2020</u>    |    | <u>2019</u>    |
|------------------------------------|----|----------------|----|----------------|
| Accumulated and compensatory leave | \$ | <u>247,612</u> | \$ | <u>219,651</u> |

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

### **NOTE 10 – 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 2020 was \$471,552. The Authority will be required to purchase credits in future years to comply with environmental regulations until the Authority completes the nutrient upgrade project 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 11 – 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 reimbursements in the amount of \$254,163 to ARWA 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 received a reimbursement of \$201,423 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 10. The agreement was to commence with compliance year 2015 and for each year thereafter through and including compliance year 2018. During 2018, the Authority executed an agreement with the County to further extend this agreement for compliance years 2019 and 2020. In July 2019, another agreement was executed with Chesterfield County to supply nitrogen credits through 2024.

### **NOTE 12 – 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.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Financial Statements  
June 30, 2020 (Continued)

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### **NOTE 12 – RISK MANAGEMENT: (CONTINUED)**

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 13 – UPCOMING PRONOUNCEMENTS:**

Statement No. 87, *Leases*, requires 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. The requirements of this Statement are effective for reporting periods beginning after June 15, 2021.

Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period*, provides guidance for reporting capital assets and the cost of borrowing for a reporting period and simplifies accounting for interest cost incurred before the end of a construction period. The requirements of this Statement are effective for reporting periods beginning after December 15, 2020.

Statement No. 92, *Omnibus 2020*, addresses practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics such as leases, assets related to pension and postemployment benefits, and reference to nonrecurring fair value measurements of assets or liabilities in authoritative literature. The effective dates differ by topic, ranging from January 2020 to periods beginning after June 15, 2021.

Statement No. 94, *Public-Private and Public-Public Partnerships and Availability of Payment Arrangements*, addresses issues related to public-private and public-public partnership arrangements. This Statement also provides guidance for accounting and financial reporting for availability payment arrangements. The requirements of this Statement are effective for reporting periods beginning after June 15, 2022.

Statement No. 96, *Subscription-Based Information Technology Arrangements (SBITAs)*, (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset—an intangible asset—and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. The requirements of this Statement are effective for reporting periods beginning after June 15, 2022.

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

### **NOTE 14 – SUBSEQUENT EVENT:**

On January 30, 2020, the World Health Organization ("WHO") announced a global health emergency stemming from a new strain of coronavirus that was spreading globally (the "COVID-19 outbreak"). On March 11, 2020, the WHO classified the COVID-19 outbreak as a pandemic, triggering volatility in financial markets and a significant negative impact on the global economy. The COVID-19 pandemic has developed rapidly in 2020 and remains a quickly evolving situation. As a result of the spread of COVID-19, economic uncertainties have arisen which are likely to negatively impact economic activity. South Central Wastewater Authority is not able to estimate the effects of the COVID-19 pandemic for fiscal year 2021.

**- Required Supplementary Information -**

**SOUTH CENTRAL WASTEWATER AUTHORITY**

Schedule of Changes in Net Pension (Asset) Liability and Related Ratios  
For the Measurement Dates of June 30, 2014 through June 30, 2019

|   | <u>2019</u>         | <u>2018</u>         | <u>2017</u>         | <u>2016</u>         | <u>2015</u>         | <u>2014</u>         |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>Total pension liability</b>  |                     |                     |                     |                     |                     |                     |
| Service cost  | \$ 177,128          | \$ 172,960          | \$ 162,869          | \$ 172,484          | \$ 171,384          | \$ 164,219          |
| Interest  | 307,432             | 283,750             | 276,711             | 269,159             | 257,015             | 238,485             |
| Differences between expected and actual experience  | (42,917)            | 21,506              | (91,312)            | (199,473)           | (116,926)           | -                   |
| Changes of assumptions  | 145,795             | -                   | (108,626)           | -                   | -                   | -                   |
| Benefit payments, including refunds of employee contributions                             | (136,054)           | (143,735)           | (134,457)           | (134,098)           | (141,873)           | (134,116)           |
| <b>Net change in total pension liability</b>  | <u>\$ 451,384</u>   | <u>\$ 334,481</u>   | <u>\$ 105,185</u>   | <u>\$ 108,072</u>   | <u>\$ 169,600</u>   | <u>\$ 268,588</u>   |
| <b>Total pension liability - beginning</b>  | <u>4,459,915</u>    | <u>4,125,434</u>    | <u>4,020,249</u>    | <u>3,912,177</u>    | <u>3,742,577</u>    | <u>3,473,989</u>    |
| <b>Total pension liability - ending (a)</b>   | <u>\$ 4,911,299</u> | <u>\$ 4,459,915</u> | <u>\$ 4,125,434</u> | <u>\$ 4,020,249</u> | <u>\$ 3,912,177</u> | <u>\$ 3,742,577</u> |
| <b>Plan fiduciary net position</b>  |                     |                     |                     |                     |                     |                     |
| Contributions - employer  | \$ 89,420           | \$ 119,474          | \$ 116,205          | \$ 136,390          | \$ 134,611          | \$ 136,218          |
| Contributions - employee  | 83,449              | 85,013              | 80,016              | 76,911              | 76,008              | 73,798              |
| Net investment income   | 297,146             | 300,041             | 436,493             | 62,297              | 148,134             | 429,411             |
| Benefit payments, including refunds of employee contributions                             | (136,054)           | (143,735)           | (134,457)           | (134,098)           | (141,873)           | (134,116)           |
| Administrative expense  | (2,820)             | (2,491)             | (2,415)             | (2,045)             | (1,930)             | (2,224)             |
| Other   | (188)               | (272)               | (393)               | (26)                | (31)                | 22                  |
| <b>Net change in plan fiduciary net position</b>  | <u>\$ 330,953</u>   | <u>\$ 358,030</u>   | <u>\$ 495,449</u>   | <u>\$ 139,429</u>   | <u>\$ 214,919</u>   | <u>\$ 503,109</u>   |
| <b>Plan fiduciary net position - beginning</b>  | <u>4,378,433</u>    | <u>4,020,403</u>    | <u>3,524,954</u>    | <u>3,385,525</u>    | <u>3,170,606</u>    | <u>2,667,497</u>    |
| <b>Plan fiduciary net position - ending (b)</b>   | <u>\$ 4,709,386</u> | <u>\$ 4,378,433</u> | <u>\$ 4,020,403</u> | <u>\$ 3,524,954</u> | <u>\$ 3,385,525</u> | <u>\$ 3,170,606</u> |
| <b>Authority's net pension (asset) liability - ending (a) - (b)</b>                       | \$ 201,913          | \$ 81,482           | \$ 105,031          | \$ 495,295          | \$ 526,652          | \$ 571,971          |
| <b>Plan fiduciary net position as a percentage of the total pension (asset) liability</b> | 95.89%              | 98.17%              | 97.45%              | 87.68%              | 86.54%              | 84.72%              |
| <b>Covered payroll</b>  | \$ 1,722,725        | \$ 1,742,066        | \$ 1,623,382        | \$ 1,548,944        | \$ 1,525,607        | \$ 1,478,344        |
| <b>Authority's net pension (asset) liability as a percentage of covered payroll</b>       | 11.72%              | 4.68%               | 6.47%               | 31.98%              | 34.52%              | 38.69%              |

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

## Schedule of Employer Contributions - Pension For the Years Ended June 30, 2011 through June 30, 2020

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| <b>Fiscal Year</b> | <b>Contractually Required Contribution<br/>(1)</b> | <b>Contributions in Relation to Contractually Required Contribution<br/>(2)</b> | <b>Contribution Deficiency (Excess)<br/>(3)</b> | <b>Employer's Covered Payroll<br/>(4)</b> | <b>Contributions as a % of Covered Payroll<br/>(5)</b> |
|--------------------|--|---|---|---|--|
| 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%  |
| 2018               | 119,474  | 119,474   | -   | 1,742,066                                 | 6.86%  |
| 2019               | 89,435   | 89,435  | -   | 1,722,725                                 | 5.19%  |
| 2020               | 89,508   | 89,508  | -   | 1,766,107                                 | 5.07%  |



## SOUTH CENTRAL WASTEWATER AUTHORITY

### Notes to Required Supplementary Information - Pension For the Year Ended June 30, 2020

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**Changes of benefit terms** – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

**Changes of assumptions** – The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

All Others (Non 10 Largest) – Non-Hazardous Duty:

|   |   |
|---|---|
| Mortality Rates (pre-retirement, post-retirement healthy, and disabled) | Updated to a more current mortality table - RP-2014 projected to 2020                           |
| Retirement Rates  | Lowered rates at older ages and changed final retirement from 70 to 75                          |
| Withdrawal Rates  | Adjusted rates to better fit experience at each year age and service through 9 years of service |
| Disability Rates  | Lowered rates   |
| Salary Scale  | No change   |
| Line of Duty Disability   | Increased rate from 14.00% to 15.00%  |
| Discount Rate   | Decreased rate from 7.00% to 6.75%  |

# SOUTH CENTRAL WASTEWATER AUTHORITY

## Schedule of Changes in Total OPEB Liability (Asset) and Related Ratios - Health Insurance For the Years Ended June 30, 2018 through June 30, 2020

|  | <u>2020</u>      | <u>2019</u>      | <u>2018</u>       |
|--|------------------|------------------|-------------------|
| <b>Total OPEB liability</b>  |                  |                  |                   |
| Service cost   | \$ 7,258         | \$ 11,363        | \$ 12,090         |
| Interest   | 2,705            | 4,712            | 3,622             |
| Changes in assumptions   | 3,488            | (1,284)          | (6,890)           |
| Differences between expected and actual experience                                     | (2,728)          | (73,299)         | -                 |
| Benefit payments   | -                | -                | (2,600)           |
| <b>Net change in total OPEB liability</b>  | \$ 10,723        | \$ (58,508)      | \$ 6,222          |
| <b>Total OPEB liability - beginning</b>  | 76,101           | 134,609          | 128,387           |
| <b>Total OPEB liability - ending</b>   | <u>\$ 86,824</u> | <u>\$ 76,101</u> | <u>\$ 134,609</u> |
| <br><b>Covered-employee payroll</b>  | <br>\$ N/A       | <br>\$ N/A       | <br>\$ N/A        |
| <br><b>Authority's total OPEB liability (asset) as a percentage of covered payroll</b> | <br>N/A          | <br>N/A          | <br>N/A           |

Schedule is intended to show information for 10 years. Additional years will be included as they become available.

## SOUTH CENTRAL WASTEWATER AUTHORITY

### Notes to Required Supplementary Information - Health Insurance For the Year Ended June 30, 2020

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Valuation Date: July 1, 2019  
Measurement Date: June 30, 2019

No assets are accumulated in a trust that meets the criteria in GASB 75 to pay related benefits.

#### *Methods and assumptions used to determine OPEB liability:*

|                         |   |
|-------------------------|---|
| Actuarial Cost Method   | Entry Age Normal cost method  |
| Discount Rate           | 3.62% as of June 30, 2018; 3.13% as of June 30, 2019  |
| Inflation               | 2.50% per year as of June 30, 2018; 2.50% per year as of June 30, 2019  |
| Healthcare Trend Rate   | Healthcare trend rate of 4.20%. Rates are selected based on an economic model developed by a healthcare economist for the Society of Actuaries. |
| Salary Increase Rates   | Salary increase rates of 3.5% - 5.35% including inflation   |
| Demographic Assumptions | Assumed that 50% of employees with medical coverage would elect to retain the coverage at retirement.   |

**SOUTH CENTRAL WASTEWATER AUTHORITY**

Schedule of Authority's Share of Net OPEB Liability

Group Life Insurance (GLI) Plan

For the Year Measurement Dates of June 30, 2017 through June 30, 2019

| <b>Date</b><br><b>(1)</b> | <b>Employer's<br/>Proportion of the<br/>Net GLI OPEB<br/>Liability (Asset)</b><br><b>(2)</b> | <b>Employer's<br/>Proportionate<br/>Share of the<br/>Net GLI OPEB<br/>Liability (Asset)</b><br><b>(3)</b> | <b>Employer's<br/>Covered<br/>Payroll</b><br><b>(4)</b> | <b>Employer's<br/>Proportionate Share<br/>of the Net GLI OPEB<br/>Liability (Asset)<br/>as a Percentage of<br/>Covered Payroll<br/>(3)/(4)</b> | <b>Plan Fiduciary<br/>Net Position as a<br/>Percentage of Total<br/>GLI OPEB Liability</b><br><b>(6)</b> |
|---------------------------|--|---|---|--|--|
|                           |  |   |   | <b>(5)</b>   |  |
| 2019                      | 0.00879% \$  | 143,037 \$  | 1,722,725   | 8.30%  | 52.00%   |
| 2018                      | 0.00916%   | 139,000   | 1,742,066   | 7.98%  | 51.22%   |
| 2017                      | 0.00880%   | 132,000   | 1,623,382   | 8.13%  | 48.86%   |

Schedule is intended to show information for 10 years. Information prior to the 2017 valuation is not available. However, additional years will be included as they become available.

# **SOUTH CENTRAL WASTEWATER AUTHORITY**

## Schedule of Employer Contributions

### Group Life Insurance (GLI) Plan

For the Years Ended June 30, 2017 through June 30, 2020

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| <b>Date</b> | <b>Contractually<br/>Required<br/>Contribution<br/>(1)</b> | <b>Contributions in<br/>Relation to<br/>Contractually<br/>Required<br/>Contribution<br/>(2)</b> | <b>Contribution<br/>Deficiency<br/>(Excess)<br/>(3)</b> | <b>Employer's<br/>Covered<br/>Payroll<br/>(4)</b> | <b>Contributions<br/>as a % of<br/>Covered<br/>Payroll<br/>(5)</b> |
|-------------|--|---|---|---|--|
| 2020        | \$ 9,189   | \$ 9,189  | \$ -  | \$ 1,766,107                                      | 1%   |
| 2019        | 8,958  | 8,958   | -   | 1,722,725   | 1%   |
| 2018        | 9,059  | 9,059   | -   | 1,742,066   | 1%   |
| 2017        | 8,442  | 8,442   | -   | 1,623,382   | 1%   |

Schedule is intended to show information for 10 years. Information prior to the 2017 valuation is not available. However, additional years will be included as they become available.

## **SOUTH CENTRAL WASTEWATER AUTHORITY**

Notes to Required Supplementary Information  
Group Life Insurance (GLI) Plan  
For the Year Ended June 30, 2020

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**Changes of benefit terms** – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation.

**Changes of assumptions** – The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the period from July 1, 2012 through June 30, 2016, except the change in the discount rate, which was based on VRS Board action effective as of July 1, 2019. Changes to the actuarial assumptions as a result of the experience study and VRS Board action are as follows:

### **Non-Largest Ten Locality Employers - General Employees**

|   |  |
|---|--|
| Mortality Rates (pre-retirement, post-retirement healthy, and disabled) | Updated to a more current mortality table - RP-2014 projected to 2020                  |
| Retirement Rates  | Lowered retirement rates at older ages and extended final retirement age from 70 to 75 |
| Withdrawal Rates  | Adjusted termination rates to better fit experience at each age and service year       |
| Disability Rates  | Lowered disability rates   |
| Salary Scale  | No change  |
| Line of Duty Disability   | Decreased rate from 14.00% to 15.00%   |
| Discount Rate   | Decreased rate from 7.00% to 6.75%   |

**- Compliance -**





ROBINSON, FARMER, COX ASSOCIATES, PLLC

*Certified Public Accountants*

**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***

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**To the Honorable Members of  
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, 2020, 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 October 30, 2020.

**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) as a basis for designing 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 financial statements. 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  
October 30, 2020