

900 Magazine Rd. Petersburg, VA 23803

Office: (804) 861-0111

Fax: (804) 861-3254

South Central Wastewater Authority Board of Directors Meeting

DATE: September 21, 2017

TIME: 2:00 PM

LOCATION: Appomattox River Water Authority

Board Room, Administration Building

21300 Chesdin Road

South Chesterfield, Virginia 23803

AGENDA

- 1. Call to Order/Roll Call
- 2. Approval of Minutes: Minutes of the Regular Meeting of the Board on August 17, 2017
- 3. Public Comment
- 4. Executive Director's Report
 - Election of Vice Chairman
 - Recommendation on Award of Wastewater Treatment Improvement Project
 - Status Report: Ongoing Projects/Financials
 - Staff Recommendation on Establishment of a Capital Upgrade Account
- 5. Items from Counsel
- 6. Closed Session
- 7. Other Items from Board Members/Staff Not on Agenda
- 8. Adjourn

Cc:W. Dupler/George Hayes, Chesterfield

D. Harrison, Petersburg Public Works

W. Henley, Colonial Heights

K. Massengill, Dinwiddie County

A. Anderson, McGuire Woods

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 1 of 20

| 2. | Approval of Minutes: Minutes of the Regular Meeting of the Board on August 17, 2017 |
|----|---|

1. Call to Order/Roll Call

Following are the minutes of the Regular Meeting of the South Central Wastewater Authority Board of Directors on August 17, 2017.

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

BOARD OF DIRECTORS MEETING

South Central Wastewater Authority August 17, 2017 at 2:00 p.m. Location: Appomattox River Water Authority 21300 Chesdin Road, S. Chesterfield, Virginia

PRESENT:

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

ABSENT:

Joseph Casey, (Chesterfield) William Henley, Vice Chairman (Colonial Heights) William Dupler, (Alternate, Chesterfield) Daniel Harrison (Alternate, Petersburg)

STAFF:

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

OTHERS:

Jack Berry, (Petersburg)
Chris Tabor, (Hazen & Sawyer)
Mike Wooden, (Arcadis)
Scott Morris, (Chesterfield County Utilities)
Mark Krueger, (Chesterfield Resident)

Mr. Ashcraft, Chairman, called the meeting to order at 2:06 p.m.

1. Call to Order/Roll Call.

The roll was called.

2. Approval of Minutes: Minutes of the Regular Board Meeting on July 20, 2017:

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

RESOLVED, that the minutes of the Regular Meeting of the Board on July 20, 2017 are hereby approved:

For: 5 Against: 0 Abstain: 0

3. Public Comment

There were no public comments.

4. Executive Director's Report

• Status Report: Ongoing Projects/Operational/Financial

Mr. Gordon reported on the Status Report of Ongoing Projects/Operational/Financial and the I&I Report. He stated that SCWWA will have limited leachate deliveries next week due to the Pipeline Construction Project. He further stated that SCWWA's financial reports are preliminary until the Financial Audit is completed.

Dr. Wichser stated we negotiated private purchase of Total Nitrogen Nutrient Credits with Chesterfield County for compliance years 2018, 2019 and 2020. The net savings versus purchasing these credits from the Virginia Nutrient ExChange over these three years is \$530,000, which covers payment for the entire Executive Director's salary and one third of the Assistant Executive Director's salary over the three year period. He further stated our separate revenue stream outside of member contributions is running between \$1.5 million and \$1.8 million per year of revenue income, which is from landfill leachate treatment. Mr. Ashcraft asked if there was an ending to leachate and Mr. Gordon replied that he recently talked with the current Waste Management facilities coming to the SCWWA and they are in need of capacity to offload leachate generated from these facilities.

5. Items from Counsel

There were no items from Counsel.

6. Closed Session

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 3 of 20 There was no Closed Session.

7. Executive Director's Annual Review

This item will be taken up during Closed Session at ARWA's meeting.

8. Other Items from Board Members/Staff Not on Agenda

There were no other items from Board Members/Staff Not on Agenda.

• Change in location for September Board Meeting: ARWA not SCWWA

Dr. Wichser stated due to construction at SCWWA the September 21, 2017 Board Meeting's location with be at ARWA.

9. Adjourn

Upon a motion made by Mr. Hayes and seconded by Mr. Wilson the meeting was adjourned at 2:16 p.m.

The next regularly scheduled Board meeting is Thursday, September 21, 2017 at 2:00 p.m. at the Appomattox River Water Authority.

| MINUTES APPROVED BY: | |
|----------------------|--|
| | |
| George Hayes | |
| Secretary/Treasurer | |

3. Public Comment

The Guidelines for Public Comment are:

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

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

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

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

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

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

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

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 5 of 20

| 4. | Executi | ve Director's Report |
|----|---------|---------------------------|
| | • | Election of Vice Chairman |

• Recommendation on Award of Wastewater Treatment Improvement Project

Following is a memo regarding staff recommendation on the award of the Wastewater Treatment Plant Phase 2 Improvements Project.

TO: SOUTH CENTRAL WASTEWATER AUTHORITY

BOARD OF DIRECTORS

FROM: ROBERT C. WICHSER, EXECUTIVE DIRECTOR

JAMES C. GORDON, ASSISTANT EXECUTIVE DIRECTOR

SUBJECT: PHASE 2 WASTEWATER TREATMENT IMPROVEMENT PROJECT

DATE: SEPTEMBER 21, 2017

On June 25, 2017 SCWWA advertised for bids related to the facility Wastewater Treatment Phase 2 Improvement Project. Base Bid Items included all work associated with the demolition of the existing unit and providing a new grit dewatering (Base Bid No. 1) along with demolition of the existing scum concentration equipment and providing a new scum concentrator (Base Bid No. 2). Additionally, as an Alternative Bid item, we included the removal and replacement of the failed grout bottoms in Clarifiers Number 1 & 2. A pre-bid conference was held at SCWWA on Wednesday, July 12, 2017, and bids were opened on August 9, 2017 at 2:00 PM.

The project Grit Classifier Replacement Project was Board approved in May 2016 with the acceptance of the 2016-2017 SCWWA Equipment Repair and Replacement projects. Due to the City of Petersburg's impact on the SCWWA budget expenditures in 2017, this project was never undertaken. We request that the Board approve carryover of the May 2016 approved funds of \$650,000 into the 2017/2018 Budget so that the grit dewatering project may now be completed. The Scum Concentrator Replacement Project was scheduled for the 2017/2018 budget with May 2017 Board approved funding of \$500,000. The project consultant engineer (WW Associates) came in with an estimate that had total projected construction costs at \$1,186,000, and there is \$1,150,000 in the budget (with the requested carry-over of \$650,000 for the Grit Classifier Replacement) for these two wastewater treatment improvements (Grit & Scum Unit Replacement).

As stated above, in addition to the Grit and Scum unit replacement, we added into the bid package a request for an Alternative Bid towards removal and replacement of the failed grout bottoms in Clarifiers Number 1 & 2. The Engineer's estimate (based on a contractor's estimate) towards the grout replacement was \$418,000, bringing the Engineer's total project estimate to \$1,604,000.

The bids received were as follows:

| Contractor | Total Construction Cost Including Grout Replacement |
|------------|---|
| | |
| Waco | \$1,590,000 |
| MEB | \$1,155,000 |
| Anderson | \$984,000 |

Our project Engineer WW Associates has reviewed the contractor-submitted bid information and references and has recommended award of this project to Anderson Construction of Lynchburg, Virginia for \$984,000.

Project costs are as follows:

- WW Associates engineering cost (Design, Bidding Assistance, Construction Administration/Inspection on the upgrade project): \$66,500
- Contractor Cost: \$984,000
- Project cost (Engineering, Bidding Services, Construction Administration/Inspection, and Construction Contractor): \$1,050,500
- Total SCWWA Wastewater Treatment Improvement Upgrade Project Board-approved budgeted funds: \$1,150,000

BOARD ACTION REQUESTED:

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

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 8 of 20

• Status Report: Ongoing Projects/Operational/Financial/I&I

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

TO: SOUTH CENTRAL WASTEWATER AUTHORITY BOARD OF DIRECTORS

FROM: ROBERT C. WICHSER, EXECUTIVE DIRECTOR

JAMES C. GORDON, ASSISTANT EXECUTIVE DIRECTOR

SUBJECT: STATUS REPORT – ON-GOING PROJECTS

DATE: September 21, 2017

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

Waterline Replacement Project

- This project is under construction.
- It is estimated that 90% of the waterline has been installed.
- This project should be completed in September 2017.

Wastewater Treatment Plant Improvements, Phase 2

- This project includes 2 new grit classifier assemblies, 2 new scum concentrators, and grout repairs in secondary clarifier 1 and 2.
- Three bids were received on August 9, 2017 at 2:00 P.M. and publically opened. Anderson Construction, Inc. was the low bidder in the amount of \$ 984,000.
- Awaiting approval of funding prior to construction.

Warehouse Project

- Evaluating the regulatory framework associated with Resource Protection area requirements and how that relates/impacts the construction of a warehouse.
- Authority engineers have an environmental specialist and survey crew scheduled for the week of September 11th to locate the RPA and to provide site survey. This will allow for a determination of where the new warehouse will be located.
- Following this decision, the design of the project can begin.

Annual Maintenance Inspection

• Annual Maintenance Inspection was authorized the last week of August. A site meeting has been scheduled for October 3, 2017.

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 10 of 20

TO: SOUTH CENTRAL WASTEWATER AUTHORITY BOARD OF DIRECTORS

FROM: ROBERT C. WICHSER, EXECUTIVE DIRECTOR

JAMES C. GORDON, ASST. EXECUTIVE DIRECTOR

SUBJECT: OPERATING & FINANCIAL STATUS REPORT

DATE: September 21, 2017

Operating Status Report:

General:

- The next scheduled Board of Directors Meeting is Thursday November 16, 2017 at the South Central Wastewater Authority at 2:00 pm.
- The plant continues to accept up to 20 loads of leachate originating from the Charles City and Amelia.
- Staff continues to work with our auditors to finalize work for the November audit presentation.

•

Status of Nutrient Waste-load

- Total Phosphorus (TP)
 - o Waste-load allocation Total Phosphorus: 28,404 lbs. on a calendar basis (reduced from 35,024 in 2016)
 - Proportional waste-load through August 2017 = 18,936 lbs. Total actual waste-load through July 2017 was 10,493 lbs. (At this time, the SCWWA is 8,443 lbs. of TP <u>under</u> our expected waste-load allocation for this point in the year)
- Total Nitrogen (TN)
 - o Waste-load allocation Total Nitrogen: 350,239 lbs. on a calendar basis
 - Proportional waste-load through August 2017 = 233,493. Total actual waste-load through June 2017 was 371,179 lbs. (At this time, the SCWWA is 137,686 lbs. of TN <u>over</u> our expected waste-load allocation for this point in the year.)
 - Note: The SCWWA is locked-in to purchasing an additional 165,451 credits for 2017

Operations:

- Plant effluent met all discharge permit requirements for the month of August. Copies of the discharge monitoring reports (DMR's) for the VPDES permit and the general permit are available.
- Synagro was onsite the week of 9/11 to remove biosolids.
- Clarifier 1 is currently being sand blasted and painted. Clarifier 2 will be dropped and painted once clarifier 1 is completed.
- Working with waterline contractor to ensure plant operation is maintained.

Maintenance:

- Preparing to pull electrical wire to improve electrical system at the Chlorine Contact Tanks and power the new
 actuator that will be installed this FY. This work is being done in-house.
- Staff will be transitioning pumps from seal water to mechanical seals. All supplies for this have been received.
- Live bottom bin #1 on the solids lime system will be upgraded in October/November.

Instrumentation

- Meeting with the Authority's System Integrator to schedule this FY projects and prioritize future needs.
- Cleaning internal meters and checking on a newer verification meter.

Laboratory

- Performing internal audits.
- Sampling Biosolids and screenings

Financial Status Report:

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

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 12 of 20

| | | Budget | | Budget | | Actual | | Budget | Variance |
|---|------------------|--------------------|----------------|-----------------|--------------|--------------------|----------|--------------------|--------------------|
| Wastewater Rate Center | | FY 16/17 | Ye | ar-to-Date | Ye | ear-to-Date | 1 | vs. Actual | Percentage |
| Revenues and Expenses Summary | <u></u> | | | | | | | | |
| Operating Budget vs. Actual | | | | | | | | | |
| Revenues | | | | | | | | | |
| Septage/Misc Revenue | \$ | 1,500,000 | \$ | 250,000 | \$ | 157,584 | \$ | (92,416) | -36.97% |
| O&M Revenue | Ś | 7,084,300 | | 1,180,717 | \$ | 1,180,717 | \$ | (0) | 0.009 |
| Reserve Policy | Ś | 685,868 | \$ | 114,311 | \$ | 114,311 | \$ | (0) | 0.009 |
| ER&RF Revenue | Ś | 429,215 | \$ | 71,536 | \$ | 70,536 | \$ | (1,000) | -1.409 |
| Total Opera | ting Revenues \$ | • | | 1,616,564 | \$ | 1,523,148 | \$ | (93,416) | -5.789 |
| | | | | | | | | | |
| Expenses | | | | | | | | | |
| Personnel Cost | Ş | | \$ | 438,250 | \$ | 482,508 | \$ | 44,257 | 10.109 |
| Contractual/Professional Services | Ş | 346,300 | \$ | 81,748 | \$ | 51,829 | \$ | (29,919) | -36.609 |
| Utilities | \$ | 490,000 | \$ | 81,667 | \$ | 63,205 | \$ | (18,462) | -22.619 |
| Communication | \$ | 20,000 | \$ | 3,333 | \$ | 1,563 | \$ ¢ | (1,771) | -53.129 |
| Office/Lab/Purification Supplies | \$ | 73,500 | \$ | 12,517 | \$ | 13,540 | \$ ¢ | 1,023 | 8.189 |
| Insurance | \$ * | 65,000 | \$ | 21,667 | Ş | 18,042 | ې د | (3,625) | -16.739 |
| Lease/Rental Equipment Travel/Training/Dues | \$ 6 | 11,000 63,600 | \$ \$ | 1,833 16,525 | \$ | 575 10,374 | ې د | (1,259) (6,151) | -68.669 -37.229 |
| Safety/Uniforms | ټ خ | 41,500 | ې د | 6,917 | ې د | 4,703 | ې د | (6,151) (2,213) | -32.009 |
| Chemicals/Sludge Disposal | ې خ | 910,000 | ې د | 151,667 | ې د | 91,644 | ې د | (60,022) | -39.589 |
| Repair/Maintenance Parts & Supp | ع المح | 492,500 | ب خ | 82,084 | ب خ | 66,221 | ب خ | (15,863) | -19.339 |
| • • | ting Expenses \$ | 5 5,142,900 | \$ | 898,207 | <u> </u> | 804,202 | <u> </u> | (94,005) | -19.33 <i>7</i> |
| | uplus/(Deficit) | | \$ | 718,357 | , | 718,946 | \$ | 589 | 0.089 |
| Replacement Outlay Budget vs. Actu | _ | | <u> </u> | · · | | | | | |
| Nepracement Outlay Budget Vs. Acta | a. | | | | | | | | |
| Machinery & Equipment | \$ | 350,000 | \$ | 58,333 | \$ | 8,591 | \$ | (49,742) | -85.279 |
| Instrumentation | \$ | 43,500 | \$ | 7,250 | \$ | - | \$ | (7,250) | -100.009 |
| SCADA | \$ | 36,000 | \$ | 6,000 | \$ | - | \$ | (6,000) | -100.009 |
| Computer Equipment | \$ | 25,600 | \$ | 4,267 | \$ | - | \$ | (4,267) | -100.009 |
| Motor Vehicles | \$ | 75,000 | \$ | 12,500 | \$ | - | \$ | (12,500) | -100.009 |
| Construction | \$ | 1,540,000 | \$ | 256,667 | \$ | 90,527 | \$ | (166,140) | -64.739 |
| Special Studies | <u> </u> | 35,000 | \$ | 5,833 | <u> </u> | - | \$ | (5,833) | -100.009 |
| Total Replac | ement Outlay \$ | 2,105,100 | \$ | 350,850 | \$ | 99,119 | \$ | (251,732) | -71.75% |
| Other Income/Expense Budget vs. Ac | ctual | | | | | | | | |
| | > | 960,000 | ć | 71,667 | ć | 146,458 | ć | 143,333 | 200.00 |
| Nutrient Credit Purchases (Expen | se) \$ | 860,000 | \$ | 71,007 | \$ | • | Ş | 143,333 | |
| Nutrient Credit Purchases (Expen Nutrient Reduction Interest-Jurisdictions (Income) | se) | - | \$ \$ \$ | - | \$ \$ | 4,342 (224,322) | \$ | - (224,322) | #DIV/0! #DIV/0! |

South Central Wastewater Authority

For Month Ending August 31, 2017

Assets

| Assets | | | |
|------------------------------------|------------------------------------|-----------------|---------------------------|
| Current Assets | | | |
| | Petty Cash | \$ | 250 |
| | Wells Fargo Operating Account | \$ | 3,935,552 |
| | Wells Fargo FY 15/16 Carryover | \$ \$ | 996,000 |
| | Total Unrestricted Cash | \$ | 4,931,802 |
| | Wells Fargo Reserve | \$ | 2,143,840 |
| | ERRF | \$ | 2,554,316 |
| | Total Restricted Cash | \$ \$ | 4,698,155 |
| | Total Checking/Savings | \$ | 9,629,957 |
| | Accounts Receivable | \$ | 258,263 |
| | Long Term Receivable (Petgs/Legal) | \$ | 109,530 |
| Total Current Assets | | \$ | 9,997,750 |
| Fixed Assets | | | |
| | Sewer System Plant | \$ | 33,352,033 |
| | Equipment & Vehicles | \$ | 2,974,264 |
| | Plant Machinery | \$ | 7,408,956 |
| | Construction in Progress | \$ | 1,907,962 |
| | Land | \$ | 92,968 |
| | Accumulated Depreciation | | (27,480,849) |
| Total Fixed Assets | riccamarated Depressation | \$ \$ | 18,255,333 |
| | | | |
| Other Assets | Inventory | Ċ | 656,081 |
| | Pension | \$ | |
| Total Other Assets | Pension | \$ \$ | 113,903 769,985 |
| | | | |
| Total Assets | | \$ | 29,023,068 |
| Liabilities & Equity | | | |
| Current Liabilities | | | |
| | Accounts Payable | \$ | 40,320 |
| Total Current Liabilities | necesine rayasie | \$ | 40,320 |
| Total Current Liabilities | | • | 40,320 |
| Other Current Liabilities | Dougell Accrucic | ¢ | 216 094 |
| | Payroll Accruals | \$ | 216,084 |
| | Retainage Payable | \$ | 143,333 |
| | Suspense-Clearing Account | \$ | 3,365,111 |
| | Refunds Due Member Localities | \$ \$ | - |
| Total Other Current Liabilities | | <u>\$</u> | 3,724,528 |
| Long Term Liabilities | | | |
| | Net OPEB Obligation | \$ | 71,800 |
| | Def Inf Res-Net Dif Pension Inv | \$ | 100,446 |
| | Net Pension Liability | | 495,295 |
| Total Long-Term Liabilities | · | \$ \$ | 667,541 |
| Total Liabilities | | \$ | 4,432,389 |
| Equity | | | |
| Equity | Retained Earnings | \$ | 10,170,469 |
| | Initial Locality Contribution Cap. | \$ | 14,166,822 |
| | Not Income | ~ | 353 300 |
| Takal Constru | Net Income | \$ \$ | 253,388 |
| Total Equity | | \$ | 24,590,679 |
| Total Liabilities & Equity | | \$ | 29,023,068 |
| | | | - , |

TO: SOUTH CENTRAL WASTEWATER AUTHORITY BOARD OF DIRECTORS

FROM: ROBERT C. WICHSER, EXECUTIVE DIRECTOR

JAMES C. GORDON, ASSISTANT EXECUTIVE DIRECTOR

SUBJECT: INFLOW AND INFILTRATION

DATE: September 21, 2017

August 2017 is very comparable to August 2011. August is typically very dry but in 2011 and 2017 we saw >8" of precipitation and almost reached 9". The first rain event was on August 7th and we received substantial rain events every 9-10 days after that. After each of the rain event the flows increased and prior to the next event flows decreased back to 9-10 mgd. The average flow to SCWWA prior to the 7th was 8.27 mgd and after the 7th the average flow was 14.26 mgd. The max flow of 36.422 mgd came on the 29th and we received 1.22" on the 28th and 1.75" on the 30th.

| Month | Rainfall (inches) | Average Flow (mgd) |
|----------------|----------------------|--------------------|
| August 2016 | 0.64 | 9.030 |
| September 2016 | 8.45 | 10.565 |
| October 2016 | 3.65 | 14.198 |
| November 2016 | 1.16 | 9.194 |
| December 2016 | 2.28 | 9.980 |
| January 2017 | 3.31 | 14.509 |
| February 2017 | 1.03 | 10.873 |
| March 2017 | 4.90 | 11.681 |
| April 2017 | 1.46 | 11.152 |
| May 2017 | 6.88 | 12.444 |
| June 2017 | 2.19 | 10.264 |
| July 2017 | 4.38 | 9.741 |
| August 2017 | 8.78 | 13.098 |

PRIMARY FLOW DATA

| August | 2017 | 2016 | 2015 | 2014 | 2013 | 2012 | 2011 |
|-------------------|--------|--------|--------|--------|--------|--------|--------|
| Minimum (mgd) | 7.942 | 8.130 | 8.480 | 8.128 | 9.761 | 9.374 | 9.116 |
| Maximum (mgd) | 36.422 | 10.663 | 12.365 | 15.212 | 23.012 | 15.979 | 32.066 |
| Average (mgd) | 13.098 | 9.030 | 9.835 | 10.279 | 11.817 | 10.236 | 11.627 |
| Rainfall (inches) | 8.78 | 0.64 | 2.38 | 5.86 | 3.17 | 3.02 | 8.84 |

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 15 of 20

| • | Staff Recommendation on Establishment of a Capital Upgrade Account | | | | |
|---|--|--|--|--|--|
| | Following is a memo concerning staff's recommendation for the establishment of a Capital Upgrade Account | | | | |
| | | | | | |

TO: BOARD OF THE SOUTH CENTRAL WASTEWATER AUTHORITY

FROM: ROBERT C. WICHSER, EXECUTIVE DIRECTOR

JAMES C. GORDON, ASSISTANT EXECUTIVE DIRECTOR

SUBJECT: ESTABLISHMENT OF A CAPITAL IMPROVEMENT FUND USING

LEACHATE REVENUES

DATE: SEPTEMBER 21, 2017

Recommended Capital Improvements and the Need for a Financial Cushion for Operations.

Starting in 2014 staff has discussed numerous times and provided written estimates and analyses to the Board on the eventual need for a regulatory nutrient removal capital project (including the replacement of aging infrastructure and construction of wet weather improvements) that we expect will be undertaken by SCWWA in 2022 or 2023 based on the lack of available nutrient credits to offset SCWWA's required nutrient wasteload allocation. This project's cost estimate in 2014 proposed by our Trust Engineer was expected to cost approximately \$62.2M.

In addition, staff intends to recommend to the Board in developing the fiscal year 2018 budget that SCWWA move forward and upgrade the facility's Solids Handing Building. This facility was to be entirely upgraded in 2011/12 and the dewatering equipment is now well past its intended useful life. A significant portion of the SCWWA maintenance department's man-hours are related to maintaining this equipment. In addition, parts for the dewatering equipment are not manufactured anymore and require custom fabrication. *This places the dewatering facility as the weak link in maintaining one-hundred percent permit compliance*. We might expect that the upgrade to the Solid Dewatering Building to cost in the range of \$4-6M. We expect that the Solids Building upgrade project schedule would run 2.5 years if design started in fiscal year 2018.

The Board is well aware of the financial problems SCWWA faced in fiscal years 2016 and 2017 and the impacts on SCWWA's operations and how much worse it would have been without the cushion provided by the leachate revenues to be discussed below.

The "True-Up" Under the Existing Service Agreement.

The existing Service Agreement for the South Central Wastewater Authority (SCWWA) effective July 2, 1996 provides for a "true-up" under Section 10 - Operating and Maintenance Charges:

Within 90 days after the end of each Fiscal Year, the Authority shall provide to each Incorporating Subdivision a statement showing in respect of such Fiscal Year its calculation of the Incorporating Subdivision's actual share of total aggregate Operating and Maintenance Charges and the excess or deficit in the amount of Operating and Maintenance Charges actually paid by the Incorporating Subdivision during such Fiscal Year. Each Incorporating Subdivision that has paid Operating and Maintenance Charges to the Authority in an amount less than its share of total aggregate Operating and Maintenance Charges shall promptly pay to the Authority for deposit directly

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 17 of 20 into the Operating Fund, from its first available Gross Revenues the amount of such deficit. If an Incorporating Subdivision has paid Operating and Maintenance Charges in excess of its share of total Operating and Maintenance Charges in excess of its share of total aggregate Operating and Maintenance Charges, then the Authority shall credit such Incorporating Subdivision with the amount of the excess against future Operating and Maintenance Charges becoming due under Section 10.2 of this Agreement. [Emphasis and italics added.]

The true-up was included in the Service Agreement to account for the fact that a significant portion of the monthly Operating and Maintenance Charges (the "O&M Charges") assessed to each of the Incorporating Subdivisions (the "Members") pursuant to SCWWA's annual budget is based on projections of (i) the amount of Operating and Maintenance Costs (the "O&M Costs") that SCWWA will incur and (ii) the wastewater flows transmitted by the Members. Following the end of each fiscal year, the actual O&M Costs and the actual flows are tallied and allocated to each Member and then SCWWA determines whether the Member paid too much or not enough based on the budgeted O&M Charges.

In past years, when a Member paid monthly budgeted O&M Charges in excess of its share of the actual O&M Costs and/or its actual flows, pursuant to Board policy SCWWA would send a one-time true-up payment directly to the Member in either December or January.

The Leachate Revenue Effect.

The Board is aware that SCWWA has been accepting and treating landfill leachate from the Waste Management landfills located in the counties of Sussex, Amelia, and Charles City. The revenue stream derived for the treatment of this landfill leachate has not impacted the SCWWA VPDES permit compliance or increased the cost to any Member. The availability of this outside funding enabled SCWWA to weather the financial problems it faced in fiscal years 2016 and 2017.

The leachate revenues are providing an additional benefit to the Members under the Service Agreement. Almost \$1,989,616 of the expected fiscal year 2017 surplus of \$2,725,494.80 to be distributed to the Members through the true-up mechanism is attributable to the leachate revenue stream with \$725,494.80 from Member contributions. Most of the remainder is due to the spending freeze enacted by the Board halfway into the 2017 budget year.

SCWWA staff expects the fiscal year 2017 true-up to result in the following credits or payments to each Member

as follows: Adjusted "True-Up"

(based on actual Member Contributions)

City of Petersburg: \$1,422,104.87 \$281,890.27

Colonial Heights: \$694,446.14 \$334,272.32

Chesterfield: \$261,776.07 \$92,376.30

Prince George: \$168,346.93 \$32,430.24

Dinwiddie: \$168,436.80 \$15,474.34 (Owes SCWWA)

Total \$2,715,110.81 \$725,494.79

Chesterfield Colonial Heights Dinwiddie Petersburg Prince George SCWWA Page 18 of 20 SCWWA staff is pleased to be able to offer this magnitude of financial benefit to the Members. But staff is also mindful of (i) the need to fund capital improvements, (ii) the benefits of robust reserves in facing difficult financial situations and (iii) the fragility of the leachate revenue stream. We are aware that at any time the ongoing external landfill leachate revenue stream could halt. Staff also notes that all of the Members have already budgeted and are in current in paying their monthly O&M Charges for fiscal year 2018. Whether provided as a credit against the monthly O&M Charges or in a lump-sum in December or January, the true-up for fiscal year 2017 will result in an unexpected positive budget event. But not an event that the Members should expect every single year. But, so long as the leachate revenues continue to flow in, SCWWA has an opportunity to build reserves for future capital improvements and to protect its financial integrity without budget increases to the Members.

Staff Recommendation.

Staff recommends that (i) in computing the true-up for fiscal year 2017 one-hundred percent of leachate revenues received during the fiscal year be disregarded and channeled into a newly-established Capital Improvement Fund and (ii) in subsequent fiscal years all future leachate and other outside (non-Memberderived) revenue be disregarded in computing the true-up and channeled into a Capital Improvement Fund. The Capital Improvement Fund would accumulate and would be used only with Board approval to fund future capital improvement projects or to pay O&M Costs in the event of unanticipated financial emergencies.

SCWWA counsel has noted that if the Board wishes to accept staff's recommendation, then there will need to be an amendment to the Service Agreement that will require approval of the governing bodies of all five Members.

Board Action Requested:

Be it resolved that the Board of the South Central Wastewater Authority (the "Authority") directs the Authority's Executive Director and Counsel to prepare for consideration by the Board at its November meeting proposed amendments to the Service Agreement to provide that (i) in computing the true-up for fiscal year 2017 one-hundred percent of leachate revenues received during the fiscal year be disregarded and channeled into a Capital Improvement Fund to be established pursuant to the amended Service Agreement and (ii) in subsequent fiscal years all future leachate and other outside (non-Member-derived) revenue be disregarded in computing the true-up and channeled into a Capital Improvement Fund; and

Be it further resolved that the Capital Improvement Fund would accumulate and would be used only with Board approval to fund future capital improvement projects or to pay O&M Costs in the event of unanticipated financial emergencies; and

Be it further resolved that the Executive Director and Counsel are authorized to present to the Board any additional amendments to the Service Agreement they may deem worthy of the Board's consideration.

| 5. | Items from Counsel |
|----|--|
| | |
| 6. | Closed Session |
| | |
| 7. | Other Items from Board Members/Staff Not on Agenda |
| | |
| 8. | Adjourn |
| | |
| | |