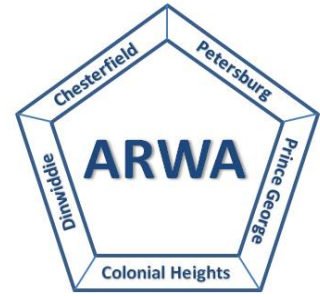


# Appomattox River Water Authority



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21300 Chesdin Rd. - S. Chesterfield, VA 23803 - Phone (804) 590-1145 - Fax (804) 590-9285

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## APPOMATTOX RIVER WATER AUTHORITY Board of Directors Meeting

DATE: January 21, 2021

TIME: 2:00 pm

LOCATION: **Appomattox River Water Authority**  
Board Room, Administration Building  
21300 Chesdin Road  
South Chesterfield, VA 23803

### AGENDA

1. Call to Order/Roll Call
2. Approval of Minutes: Minutes of the Board Meeting held on November 19, 2020 (Exhibit A, pages 2 to 7)
3. Public Comment (Exhibit B, page 8)
4. Executive Director's Report:
  - Proposed Salary Adjustment Request (Exhibit C, pages 9 to 14)
  - Proposed FY21/22 Budget Presentation (Exhibit D, pages 15 to 25)
  - Six Month Work Plan Update (Exhibit E, pages 26 to 29)
  - Status Report (Exhibit F, pages 30 to 32)
  - Annual Flushing Notice (Exhibit G, page 33)
  - Financials (Exhibit H, pages 34 to 37)
5. Items from Counsel
6. Closed Session
  - Executive Director's Annual Evaluation
7. Other items from Board Members/Staff Not on Agenda
8. Adjourn

**BOARD OF DIRECTORS MEETING**  
**Appomattox River Water Authority**  
**November 19, 2020 at 2:00 p.m.**  
**Location: South Central Wastewater Authority**  
**900 Magazine Road, Petersburg, VA 23803**

**MEMBERS PRESENT:**

Doug Smith, Chairman (Colonial Heights)  
Kevin Massengill, Vice-Chairman (Dinwiddie)  
Aretha Ferrell-Benavides, (Petersburg)  
Joseph Casey, (Chesterfield)

**ALTERNATES PRESENT:**

Frank Haltom, (Alternate, Prince George)  
Scott Morris, (Alternate, Chesterfield)

**ABSENT:**

Percy Ashcraft, (Prince George)  
George Hayes, Secretary/Treasurer (Alternate, Chesterfield)  
Lionel Lyons, (Alternate, Petersburg)  
Todd Flippen, (Alternate, Colonial Heights)

**STAFF PRESENT:**

Robert B. Wilson, Executive Director, (ARWA & SCWWA)  
James C. Gordon, Asst. Executive Director (ARWA & SCWWA)  
Arthur Anderson, (McGuire Woods)  
Melissa Wilkins, Business Manager/FOIA (ARWA & SCWWA)  
Kathy Summerson, Administrative Assistant (SCWWA)

**OTHERS PRESENT:**

Chris Tabor, (Hazen and Sawyer)  
Benjamin Packett, (Robinson, Farmer, Cox Associates)  
Alec Brebner, (Executive Director, Crater Planning District)

The ARWA meeting was called to order after the conclusion of the SCWWA Board meeting by Mr. Smith, Chairman, at 2:56 p.m.

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

The roll was called:	Doug Smith	Present
	Kevin Massengill	Present
	Joseph Casey	Present
	Frank Haltom	Present
	Aretha Ferrell-Benavides	Present (via conference call)

Mr. Smith stated Ms. Ferrell-Benavides would be joining the meeting by conference call due to the City of Petersburg's policy that does not permit meeting in person when more than four individuals are present. Mr. Anderson stated the policy adopted by the Authority does require that the Board vote to permit remote participation.

Upon a motion made by Dr. Casey and seconded by Mr. Haltom the Board voted to approve Ms. Ferrell-Benavides to be present by conference call.

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

**2. Approval of Minutes: Minutes of the Regular Meeting of the Board on September 10, 2020**

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

**RESOLVED, that the Minutes of the Regular Meeting of the Board on September 10, 2020 are hereby approved:**

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

**3. Public Comment**

There were no Public Comments.

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

• **Proposed In-plant Phase III Project Award**

Mr. Wilson reported on the proposed change order #2 for the in-plant projects. He stated there is approximately \$450,000 remaining. He reported what we are proposing to do is add two butterfly valves, actuators, and pressure relief valves. MEB is the contractor who has completed Phase #1 and Phase #2 inside the plant. He stated our recommendation is to treat this as a change order for the labor with MEB. The Authority would purchase the materials and then we would move forward with that project. He stated we are not looking for a contingency in this project.

Mr. Haltom asked if there were any other priority projects eligible for these funds, and Mr. Wilson answered as far as what is in the project we have used the bond proceeds for everything inside the fence. This project involved pre-purchasing and we borrowed the money before we had the project fully identified, and we ended up with surplus funds. Dr. Casey asked if this consumed all the remaining bonds funds or were there more left over after this project, and Mr. Wilson stated we still have a little bit of interest left over that has not been spent. If there is enough left to do the next project in the plant, we

would come back to the Board to request approval. Dr. Casey asked if there was a certain period, we needed to consume the funds or apply that to a debt service payment and bring closure to arbitrage and things like that. Mr. Anderson stated these bonds were issued in 2017 and they are yield restricting now. He further stated that by next year he would want the money to be out of there, so we do not become a target on an audit basis. Mr. Anderson stated we could use it to pay or reimburse ourselves for paying debt service. Dr. Casey suggested that by June 30<sup>th</sup> staff bring a recommendation to the board.

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

**RESOLVED, that the Board authorizes the Executive Director to purchase the butterfly valves, actuators, and surge relief valves in the amount of \$115,984.51 and process a change order with MEB for the labor to install the valves and perform the fluoride and hypo improvements in the amount of \$318,326.27 with the Phase 1 project:**

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

Doug Smith	Aye
Kevin Massengill	Aye
Joseph Casey	Aye
Frank Haltom	Aye
Aretha Ferrell-Benavides	Aye

- **Annual Financial Report Year Ended June 30, 2020: Robinson, Farmer, Cox Associates**

Mr. Wilson stated he received a late email from Mr. Hayes that Mr. Morris would have some comments about this Agenda item. He then introduced Benjamin Packett of Robinson, Farmer, Cox Associates, who provided a presentation on SCWWA's Annual Financial Accounting Audit. He stated ARWA received a clean compliance report.

Dr. Casey referenced footnote one about describing an entity and there have been some changes in that description. He stated Mr. Morris is going to summarize what Mr. Hayes' points were. Mr. Morris stated on pages 15 and 16 it states that they complied with some of the recommendations from Chesterfield County, but it is unclear how they complied with the deletion of that table. He further stated Chesterfield can assist ARWA in future development of financial tables, if you wish to update the future CAFR to meet those compliance obligations that they recommended in their previous audit. Dr. Casey stated this is something we could talk about next year in the preliminary planning phases for the audit report. He further stated he respected the way GASB is and the rules that are followed, but it seems like the description of the history of this entity is longer than the description in Chesterfield's audit report. He does not know if that is the quirk of service agreements and disclosures, etc. Mr. Packett stated they did not typically make changes to Note 1 unless management recommends it.

Mr. Smith asked Mr. Morris for clarification what the table was that was referenced, and Mr. Morris replied it was the table that broke down the capacity. Mr. Anderson stated he was asked to look at a couple of the points and he does not normally involve himself in writing these. He stated to Mr. Morris that the chart he was referring to has no legal or financial basis or effectiveness.

Upon a motion made by Mr. Haltom and seconded by Mr. Massengill the following resolution was adopted:

**RESOLVED, that the annual financial report is hereby approved as presented:**

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

Doug Smith	Aye
Kevin Massengill	Aye
Joseph Casey	Aye
Frank Haltom	Aye
Aretha Ferrell-Benavides	Aye

- **Proposed 2021 Board Meeting Dates**

Mr. Wilson presented the proposed schedule for 2021 Board of Directors meetings.

Upon a motion made by Mr. Massengill and seconded by Mr. Haltom the following resolution was adopted:

**RESOLVED, that the Board approves the proposed schedule of regular meetings dates for 2021 as presented:**

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

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

Mr. Wilson reported on the Status Report.

- **DCWA request for a second river crossing**

Mr. Wilson stated that the Dinwiddie County Water Authority has applied for a federal BRIC grant to put in a second parallel crossing on the 30" line on the Appomattox River. He further stated back when he was with DCWA they started looking at the AWIA to identify critical assets. He stated the two most critical issues they saw for the DCWA was either loss of the plant or loss of the river crossing. He further stated DCWA had gone as far as working with VDOT to develop a MOU to lay a temporary line across the bridge. He stated if you lose that line it is probably 12 to 18 months minimum to get it reestablished. Mr. Wilson stated that one of the unfortunate things he has found out so far is that DCWA did not go to the host locality, which is Dinwiddie County, and make them aware of this project. He stated when he made the Board aware of this project, that it was the first time Mr. Massengill had heard of it. Mr. Wilson stated he had talked to Mr. Hayes and the amount of grant given on an annual basis is only about \$5 million. He does not know if they will be successful in getting this, but he knows that it has been submitted. He stated the Authority's recommendation is that if DCWA is successful in getting it and willing to pay for it, the ARWA would end up with another asset at no cost to the members.

Mr. Massengill stated that he was not familiar with the project until Mr. Wilson told him. He further stated the project is \$3.6 million, the grant is 75% of that, so the question he has is what happens if they are successful in obtaining the grant, and no one else assists them with the 25%. He imagines it would only be the City of Petersburg, who would receive any benefit to this. He further stated if it is the will of the Authority to move forward he is okay with it. He stated he just wanted to let the Authority know this is not typically how he would go about bringing a project such as this to the Authority.

Upon a motion made by Mr. Massengill and seconded by Mr. Haltom the following resolution, with modification of it not being a capital expense to the Authority, was adopted:

**RESOLVED, that the Board approves DCWA to proceed with obtaining a grant for a second river crossing parallel to the existing 30" water line crossing of the Appomattox River east of the Ferndale Bridge at no capital expense to the Authority. Also, the Authority agrees to accept the new asset when it is installed per Authority standards and specifications and take over the operation and maintenance of the new 30" water line crossing at the conclusion of the warranty period:**

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

- **Financials**

Ms. Wilkins reported on the Financials. She stated the balance sheet now includes the true up from the past fiscal year

## 5. **Board Officer Elections**

Mr. Smith stated that he and Mr. Massengill would be willing to remain as Chairman and Vice-Chairman if the Board approves. Also, Mr. Haltom stated he is willing to step into the Secretary/Treasurer role.

Upon a motion made by Dr. Casey and seconded by Mr. Haltom, the following officers were elected for 2021 starting January 1, 2021 for a term of two years:

Mr. Doug Smith                      Chairman

Mr. Kevin Massengill              Vice-Chairman

Mr. Frank Haltom                  Secretary/Treasurer

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

## 6. **Items from Counsel**

There were no items from Counsel.

## 7. **Closed Session**

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

Upon a motion made by Mr. Massengill and seconded by Mr. Haltom the Board went into Closed Session at 3:35 p.m.

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

Upon a motion made by Mr. Massengill and seconded by Mr. Haltom the Board came out of Closed Session at 3:42 p.m.

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

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

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

Mr. Smith thanked staff for their work on the financial report. Mr. Haltom stated he heard that the SCC has CARES funding available that we can apply for.

**9. Adjourn**

Mr. Smith stated, if there is no other business, and asked for motion to adjourn.

Upon a motion by Mr. Haltom and seconded by Mr. Massengill the meeting was adjourned at 3:46 p.m.

MINUTES APPROVED BY:

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**Frank Haltom**  
**Secretary/Treasurer**

## **CLOSED MEETING RESOLUTION**

### **APPOMATTOX RIVER WATER AUTHORITY**

**November 19, 2020**

I move that we go into a closed meeting for consultation with legal counsel retained by the Appomattox River Water Authority and briefing by staff members regarding specific legal matters pertaining to actual or probable litigation instituted or which may be instituted by a former employee of the Authority, where such consultation and briefing in open meeting would adversely affect the Authority's negotiating or litigating posture, as permitted by Section 2.2-3711A.7. of the Virginia Freedom of Information Act:

MOTION: Massengill

SECOND: Haltom

#### VOTE

Haltom	Aye
Casey	Aye
Massengill	Aye
Smith	Aye
Ferrell-Benavides	Aye

ABSENT DURING VOTE: None.

ABSENT DURING CLOSED MEETING: None.

SESSION DATE: November 19, 2020

## **CERTIFICATION OF CLOSED MEETING**

WHEREAS, the Board of the Appomattox River Water Authority (the "Authority") convened a closed meeting on November 19, 2020, pursuant to an affirmative recorded vote and in accordance with the provisions of the Virginia Freedom of Information Act; and

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

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

MOTION: Massengill

SECOND: Haltom

### VOTE

Haltom	Aye
Casey	Aye
Massengill	Aye
Smith	Aye
Ferrell-Benavides	Aye

ABSENT DURING VOTE: None.

ABSENT DURING CLOSED MEETING: None.



APPOMATTOX RIVER WATER AUTHORITY  
21300 Chesdin Road  
Petersburg, VA 23803



SOUTH CENTRAL WASTEWATER AUTHORITY  
900 Magazine Road  
Petersburg, VA 23803

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### **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.

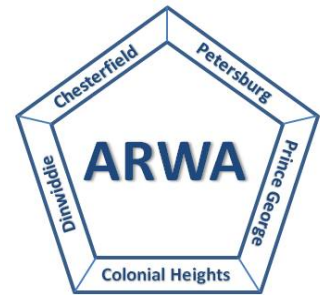
During the Public Comment Period, the Board will attempt to hear all members of the public who wish to speak on a subject, but it must be recognized that on rare occasion presentations may have to be limited because of time constraints. If a previous speaker has articulated your position, it is recommended 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.



# Appomattox River Water Authority



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## Exhibit C

TO: Appomattox River Water Authority Board of Directors

FROM: Robert B. Wilson, Executive Director  
James C. Gordon, Assistant Executive Director

DATE: January 21, 2021

SUBJECT: Proposed Salary Adjustment Request

When we presented our amended budget at the July 16, 2020 meeting that removed salary adjustments, we were advised to bring this topic up for discussion at the six month mark. On January 5<sup>th</sup> we circulated a memo requesting a salary adjustment for all full time employees at both plants. This memo illustrating our rationale is included as Attachment A.

For ARWA, the impact of the requested \$1,000 bonus and 3% merit increase is as follows:

○ \$1,000 bonus for 25 employees	\$25,000.00
○ 3% merit, additional FICA and VRS	\$20,949.94
	\$45,949.94

The current FY20/21 budget is exceeding revenue projections. This proposed bonus and merit increase do not require a budget amendment nor will it increase the cost per 1,000 gallons to any of the participating members.

In that same memo, we requested that each participating member provide detail on any salary adjustments that they are implementing for FY20/21. The following is a summary of the information we received:

### ➤ City of Colonial Heights

- November 2020 – approval of a \$600 bonus for full time employees and a \$300 bonus for year-round part-time employees employed on September 1, 2020 (that were not part of hazard pay program).
- December 2020 – 2.5% cost of living raise for full-time employees.

➤ City of Petersburg

- Tiered Resiliency Plan of \$250, \$500, and \$750 for full time employees in their January 22<sup>nd</sup> paycheck.

➤ Chesterfield County

- \$500 bonus for full time employees in their December 31, 2020 paycheck.
- \$250 bonus for part time employees in their December 31, 2020 paycheck.
- 2% merit increase effective January 23, 2021.

➤ Dinwiddie County

- \$1,000 bonus for full time employees in December 2020.
- \$500 bonus for part time employees in December 2020.
- Nothing planned for FY22.

➤ Prince George County

- \$500 bonus for full time employees being presented to the Board of Supervisors at the January 26<sup>th</sup> meeting.

**Board Action Requested:**

Staff requests that the Board approve a onetime bonus of \$1,000 and a 3% merit increase for all full time staff.



Appomattox River Water Authority  
21300 Chesdin Road  
S. Chesterfield, VA 23803  
(804) 590-1145



South Central Wastewater Authority  
900 Magazine Road  
Petersburg, VA 23803  
(804) 861-0111

### **Attachment A**

TO: Board of Directors ARWA/SCWWA

FROM: Robert B. Wilson, Executive Director  
James C. Gordon, Assistant Executive Director

DATE: January 5, 2021

SUBJECT: FY20/21 Salary Adjustments

Each participating jurisdiction has experienced some type of challenge because of Covid-19. The world as we know it has changed the way business is accomplished. Some utilities and businesses have changed the way they operate, and others have adopted telecommuting and reduced office hours and reduced public contact as the new norm. For ARWA and SCWWA, being a wholesaler of potable water and a reclamation facility for wastewater that are demand driven, we are unable to change our schedules to adapt to the new norm. No matter what happens, our customers expect and deserve to have safe, potable drinking water and a place for the wastewater to go and be treated. Whether it is a pandemic or epidemic, natural disaster, or even a power outage, most, if not all our customers, expect to have water and sewer services available twenty-four hours a day, seven days a week, three hundred and sixty-five days a year. We do not guarantee uninterruptable service, but we do everything in our power to provide it.

To provide as close to uninterruptable service as possible, as well as maintain our permit requirements, we continue to staff our facilities around the clock and provide ongoing and preventive maintenance and support. Operators are required to be onsite twenty-fours a day. Support staff including laboratory personnel, maintenance staff, IT staff, and administration perform tests and maintain systems daily, behind the scenes, so that our customers continuously receive water and wastewater services without interruption. We are constantly working to ensure our systems are reliable, redundant, and resilient.

We understand we are not front line employees in the same category as emergency medical workers and first responders that are directly affected by the pandemic, but we also understand the services both plants provide are instrumental in helping to reduce the spread of the pandemic as are the services performed by each participating member's utility department and many other supporting departments. We are fortunate to have such a dedicated team at each plant where each staff member maintains a high level of commitment and loyalty.

We have had our encounters with Covid-19 but nothing we could not overcome. Each time a challenge has been introduced, each facility has persevered, adapted, and developed a solution so that we can minimize the effect in the future.

To reward our plant staffs for their effort, dedication, and continued commitment we are recommending a one-time bonus of \$1,000 and a merit increase of 3% retroactive to January 1, 2021. For ARWA the impact on the budget for a one-time bonus for all staff equals \$25,000 and the 3% increase for six months equals \$20,950. Currently ARWA's revenues are outpacing projections and can easily absorb this increase. For SCWWA the one-time bonus equals \$31,000 and the 3% increase for six months equals \$28,812. This minor adjustment represents 2.13% of the total budget and can be easily absorbed. Neither proposed salary adjustment requires an amendment to the current FY20/21 budget.

Below is the proposed impact on each authority:

Row Labels	Sum of One-Time Bonus	Sum of 6-Months of Change	VRS Increase
ARWA	\$25,000.00	\$19,544.62	\$ 1,405.32
SCWWA	\$31,000.00	\$24,894.30	\$ 3,914.88
Grand Total	\$56,000.00	\$44,438.92	\$ 5,320.20
	ARWA Bonus Cost	\$ 25,000.00	25 Employees
	ARWA Merit Cost	\$ 20,949.94	(1)
	Total ARWA Proposal Cost	\$ 45,949.94	
	Original ARWA Budget Request	\$ 50,000.00	(2)
	SCWWA Bonus Cost	\$ 31,000.00	31 Employees
	SCWWA Merit Cost	\$ 28,812.18	(1)
	Total SCWWA Proposal Cost	\$ 59,812.18	
	Original SCWWA Budget Request	\$ 60,000.00	(2)
	Amended ARWA Personnel Budget	\$ 2,460,200.00	(3)
	Amended SCWWA Personnel Budget	\$ 2,811,600.00	(3)
	ARWA Proposed Costs	\$ 45,949.94	1.87%
	SCWWA Propsed Costs	\$ 59,812.18	2.13%
	Overall % of Budgets	2.01%	

- (1) The respective [(Plant) Merit Cost] line includes the requested 3% merit increase, resulting increased FICA tax for January to June, and resulting VRS contribution increase for January to June.
- (2) The [Original (Plant) Budget Request] is the salary adjustment presented at the March 2020 meeting.
- (3) The [Amended (Plant) Personnel Budget] total that was approved at the July 2020 meeting as part of the FY20/21 Budget does not include the respective salary adjustments shown in (2).

The reason the SCWWA Proposal Cost is so close to the Original SCWWA Budget Request is that two operators have passed their Class 1 licensure and the assistant operations manager position has been filled thereby increasing their base salary and the proposed 3% salary increase.

We have also included a table illustrating other authorities in Virginia and the salary adjustments they are implementing/proposing:

#### MARKET SURVEY OF PEER WATER AND SEWER AUTHORITIES

##### MERIT AND/OR BONUS APPROVED

<u>Service Authority</u>	<u>Bonus</u>	<u>Merit Increase</u>	<u>COLA</u>	<u>Total Increase</u>
Albemarle County Service Authority	\$1,300	3.00%	2.50%	<b>5.50%</b>
Augusta County Service Authority	0	4.00%	3.00%	<b>7.00%</b>
Halifax County Service Authority	\$500	3.00%	1.50%	<b>4.50%</b>
Harrisonburg-Rockingham County Service Authority	0	3.00%	0.00%	<b>3.00%</b>
Louisa County Service Authority	0	3.00%	0.00%	<b>3.00%</b>
Rivanna W/S and SW Authorities (\$1250/\$950/\$750)	\$1,000	3.00%	0.00%	<b>3.00%</b>
<i>Average Increase</i>				<b>4.33%</b>

##### MERIT AND/OR BONUS PROPOSED JANUARY 1, 2021

<u>Service Authority/Locality</u>	<u>Bonus</u>	<u>Merit Increase</u>	<u>COLA</u>	<u>Total Increase</u>
Fauquier County Water & Sanitation Authority	\$1,000	2.00%	2.00%	<b>4.00%</b>
Loudoun County Service Authority	0	3.00%	0.00%	<b>3.00%</b>
Prince William County Service Authority	\$500/\$300	0.00%	0.00%	<b>0.00%</b>
Town of Culpeper	0	3.00%	0.00%	<b>3.00%</b>
Washington County Service Authority (\$165-990)	\$580	3.00%	0.00%	<b>3.00%</b>
Western Virginia Water Authority (Roanoke)	\$1,250	0.00%	0.00%	<b>0.00%</b>

##### OTHERS SURVEYED

<u>Service Authority</u>	<u>Bonus</u>	<u>Merit Increase</u>	<u>COLA</u>	<u>Total Increase</u>
Amherst County Service Authority	0	0.00%	0.00%	<b>0.00%</b>

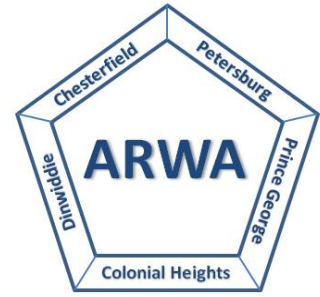
**Proposed**

<u>Service Authority</u>	<u>Bonus</u>	<u>Merit Increase</u>	<u>COLA</u>	<u>Total Increase</u>
ARWA/SCWWA	\$1,000	3.00%	0.00%	3.00%

We would be happy to add a table illustrating what the participating members are proposing/implementing for their respective utility departments. If you can provide that information prior to January 12<sup>th</sup>, we will include it in the agenda package.

We thank you in advance for your review and consideration of this request. We are available to discuss this request further via phone, teleconference, or in person.

# Appomattox River Water Authority



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## Exhibit D

TO: Appomattox River Water Authority Board of Directors

FROM: Robert B. Wilson, Executive Director  
James C. Gordon, Assistant Executive Director

DATE: January 21, 2021

SUBJECT: Proposed FY21/22 Budget

We presented the proposed FY21/22 Budget to the participating member utility directors via teleconference on December 9, 2020. Prior to the meeting, we provided the utility directors with the Proposed FY21/22 Budget Narrative and budget spreadsheets, Attachment A and Attachment B, respectively. The reason the Budget Narrative has revision dates is that we have included input from the utility directors from additional thoughts after the presentation.

The Budget Narrative provides much of the detail for the below points. However, from our discussion with the utility directors, we wanted to emphasize the following points to the Board:

- The budget is divided into operating and maintenance costs, replacement fund costs, and debt service. Each participating jurisdiction is responsible for a pro rata share of the operating and maintenance costs and replacement fund costs. The pro rata share for O&M costs and replacement fund costs is calculated from the previous five year running average for each participating jurisdiction. The percentages presented for the pro rata shares were accepted by the group.
- The 2012 Issuance and 2017 Issuance (bonds) cost to each participating member is the pro rata share for the five year running average for water purchased from the plant. The 2019 Issuance was broken down as 45.62% for expansion and 54.38% for operating. The formal breakdown for the 2019 Issuance by participating jurisdiction is outlined in the Budget Narrative.
- A 3% merit salary adjustment is requested. Not all utility directors were supportive of this increase. This will require further Board direction.
- We are proposing to set up accumulating line items for vehicle and maintenance equipment replacement. The idea is to accumulate funds annually to try to reduce large rate increases. A question was raised if this type of financing was acceptable for a "Trust". We did review this question with legal counsel and were advised we could set these funds up if the Board approved.

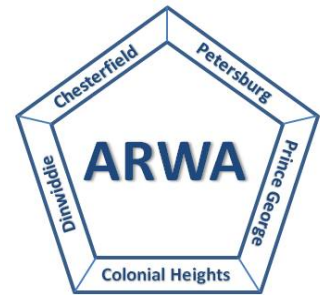
- We are recommending removing the PAC feed system. This system was included in the budget (outlying years) to address PFOS and PFAS. The Commonwealth is developing a report for these contaminants and should be complete by December 2021. Preliminary testing by two members did not find any of these contaminants in their distribution system. Furthermore, there are no industries located on Lake Chesdin.
- We are maintaining a placeholder for the Branders Bridge Tank and Pump Station. This project may be necessary to maximize the flow through the north leg of the transmission system serving the City of Colonial Heights, Prince George County, and the eastern portion of Chesterfield County. There are a lot of details to be discussed and considered. Two members are also considering separate, additional water plants on the lower Appomattox River that would reduce the need for this project. We are not at the point to make a recommendation on how to fund this project between the participating members, but we want to keep it on the radar.
- The Board will need to consider if the Authority should begin collecting funds in the future for the transmission rehabilitation/replacement. A decision does not need to be made with the current budget process.
- The VWP permit for the reservoir requires renewal in 2028. We will approach DEQ in 2026 to begin the renewal process. The last renewal cost about \$1.0 million for supporting evaluations and studies, and was funded out of the operating budget. This will also dovetail into what Krueger decides to do with their power production facility at the dam. In the current lease agreement, the Authority has to decide by January 1, 2026 if we want to renew the lease past 2032.
- The spreadsheets include a section, last page, with the changes from the previous year and the proposed increases for the next five years for planning.

**Board Action Requested:**

Staff requests Board approval to advertise the proposed FY2021/2022 Budget and set a public hearing for the budget at the March 18, 2020 Board of Directors meeting. Final Board consideration on the budget will be requested at the May 20, 2020 Board of Directors meeting.



# Appomattox River Water Authority



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21300 Chesdin Rd. - S. Chesterfield, VA 23803 - Phone (804) 590-1145 - Fax (804) 590-9285

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## Attachment A

TO: Appomattox River Water Authority Board Utility Directors

FROM: Robert B. Wilson, Executive Director  
James C. Gordon, Assistant Executive Director

DATE: December 9, 2020 (presented to utility directors)  
December 14, 2020 (revision 1)  
December 21, 2020 (revision 2)

SUBJECT: Proposed FY21/22 Budget Narrative

The budget is divided into operating and maintenance costs, replacement fund costs, and debt service. Each participating jurisdiction is responsible for a pro rata share of the operating and maintenance costs and replacement fund costs. The pro rata share for O&M costs and replacement fund costs is calculated from the previous five year running average for each participating jurisdiction.

The pro rata shares used to develop the O&M costs and replacement fund costs for FY21/22 are:

- Chesterfield County 71.394%
- City of Colonial Heights 5.721%
- Dinwiddie County 3.987%
- City of Petersburg 16.397%
- Prince George County 2.502%

The debt service for each participating jurisdiction is calculated as follows:

- 2012 Issuance – Each participating jurisdiction's pro rata share is calculated by the previous five year running average for water purchased from the plant.
- 2017 Issuance – Each participating jurisdiction's pro rata share is calculated by the previous five year running average for water purchased from the plant.
- 2019 Issuance – This issuance refinanced the 2010 Issuance. The 2019 Issuance debt service was broken down the same as the 2010 Issuance it replaced, 45.62% for expansion and 54.38% for operating. The expansion part of the annual debt service, 45.62%, is distributed between the participating jurisdictions as follows:

- Chesterfield County – 7.87%. The reason that Chesterfield pays such a small percentage towards the expansion portion of this issuance is that they paid most of their portion in cash.
- City of Colonial Heights – 5.76%.
- Dinwiddie County – 57.58%. The reason for Dinwiddie’s high percentage is that they borrowed 100% of their portion of the expansion piece of the bond.
- City of Petersburg – 0%. The City did not participate in the expansion piece of the bond.
- Prince George County – 28.79%. Similarly, to Dinwiddie, Prince George financed their entire portion of the expansion piece.

The remaining portion of the 2019 issuance, 54.38%, is divided between the participating jurisdictions on a pro rata share based on their previous five year running average.

The main factor that has a direct influence on the five year running average is rain. The higher the amount of rain, the lower the irrigation demand and the lower the consumption, water purchased. Conversely, the lower the amount of rain, the higher the irrigation demand and the higher the consumption. The next leading factor would be growth and economic development.

For the proposed FY21/22 Budget the operating and maintenance costs and replacement fund costs are developed by meeting with staff, setting priorities, and using real estimates. The proposed budget includes a 3% merit salary adjustment.

On the replacement fund side, we are proposing to add some accumulating line items. We propose to set up these accounts in the Local Government Investment Pool (LGIP) where they will also accrue interest. To assist with “leveling” the rates, we propose to set up replacement fund line items to accumulate funds over time for motor vehicles and maintenance equipment.

A schedule has been developed for replacing plant vehicles and equipment such as tractors, telescopic forklifts, etc. We propose to fund these line items, 58060 Motors Vehicles and 58065 Maintenance Equipment, annually and then purchase said equipment per our replacement schedule. This way we do not add or subtract from this capital line item and artificially inflate or deflate rates between years.

The remaining replacement purchases are outlined on the replacement fund schedule. For FY21/22 we are continuing to replace filter actuators and valves, replace outdated venturis on the outlet side of the filters – in house at four per year, and replace end of life PLC’s. We are also proposing to begin replacing the single pane windows in the filter gallery and make dock improvements with boat lifts to leave the boats accessible year round.

Under the “Construction Fund” Section we identify the debt service payments and proposed large capital projects that will require debt service borrowings. The large capital projects are highlighted in red. There are four placeholder projects in the Construction Fund Section:

1. PAC Feed System – This would be a regulatory driven project. The Commonwealth is currently working on limits for PFAS and PFOS. The report is due to the General Assembly in December 2021. This project was being added to address the removal of these contaminants if they are found to be in our source water. There has been initial testing in the Chesterfield and Colonial Heights distribution systems where neither PFAS nor PFOS was detected. The estimated cost for this chemical addition is \$2.5 million. **Since neither Chesterfield County nor the City of Colonial Heights detected any PFAS or PFOS in their distribution systems and there are no manufacturing facilities located around Lake Chesdin, we have removed this project from the CIP.**
2. Rebuild Filters 1-8 – This project rebuilds the original filters including replacing the underdrains. The estimated cost is \$5.5 million.
3. Lagoon Liners – This would be a regulatory driven project. We currently have a VPDES permit for the lagoon discharge to the Appomattox River below the dam. As part of this permit staff is required to monitor groundwater wells around the lagoons to determine if water in the lagoons may be leaching into the groundwater. Preliminary well samples indicate the lagoons are not tight. With that being said, we anticipate that DEQ will require some type of groundwater remediation as well as line the existing lagoons. From a constructability standpoint, we will have to create a third lagoon for operations while we make the improvements to the two existing lagoons. The estimated cost for this project is \$8.0 million. The timing for this project is based on the VPDES permit renewal, April 2023. As part of the permit renewal, we anticipate being required to complete the improvements by the end of that permit cycle, April 2028.
4. Branders Bridge Tank and Pump Station – This project has been discussed, debated, and mediated. Currently the project is on hold. To maximize the amount of water we can push through the eastern leg of the transmission system with the existing infrastructure this project is necessary. This project could directly benefit all five participating jurisdictions. This will be contingent on how the ground tanks are piped with respect to the transmission system. At first glance, one suggestion would be for the City of Colonial Heights and Prince George County pay for the water pump station and all other participating jurisdictions fund the ground tank(s). The estimated total project cost for this project is \$5.0 million. **The method for cost distribution, timing, and if this project moves forward will need to be discussed further.**

The remaining four projects showing appropriations, without detail in the CIP, are to build a fourth clear well and then replace and/or parallel four sections of the transmission system. From a planning perspective, these projects fall outside the five and ten year planning window. However, we wanted to keep them on the horizon and illustrate the magnitude of the proposed costs so that the participating jurisdictions can discuss these projects further. With the magnitude of these costs, the Board may want to start a Rate Stabilization Fund and collect funds annually to offset this large expense in the future. Similarly, this fund could be set up in the LGIP. These projects will be influenced by one and/or two of the participating jurisdictions developing additional water supplies on the Appomattox River.

The transmission system was originally installed in 1969 which makes it fifty-one years old. Recent coupons from wet taps show that the transmission mains are in excellent shape. There are no signs of the concrete lining failing nor pitting of the ductile pipe walls. The existing transmission system should have a remaining useful life of another thirty to forty years.

One more project, not illustrated in the budget, is the renewal for the VWP permit for the reservoir in 2028. We will approach DEQ in 2026 to determine what studies and reports are necessary to support the renewal of the permit. For the last permit renewal, the studies and reports cost approximately \$1.0 million. Therefore, we would anticipate adding \$500,000 to the operating budget in FY26/27 and FY27/28.

Future considerations for additional raw water capacity improvements at the Brasfield Dam will need to be considered in conjunctions with the forty-year license agreement with Krueger. The current agreement expires January 31, 2032. In the First Amendment that was recorded in 2016 it states that the Authority will decide by January 1, 2026 if the license agreement will be renewed. If the Authority decides to renew the license agreement, Krueger has until January 31, 2027 to begin the pre-application process for the FERC license renewal, five years ahead of the FERC license expiration date of January 31, 2032. Krueger also has the option to let the license expire and give the facilities to the Authority or consider selling the assets to the Authority prior to the January 31, 2032 expiration date.

At the bottom of the budget, we have added a “Total Replacement and Construction Budget” section. This section totals the amount of replacement fund projects and debt service. The reason we added this section was to show this total for both replacement fund projects and debt service and highlight how we are trying to minimize increases.

To assist participating jurisdictions with determining the Authority’s impact on budgets and looking at their future rates we included a section on estimated rates for the next five years. For these future estimates, we increased the operating expenses annually by 3%, did not inflate the replacement fund costs, and used debt service values from the respective payment schedules. For the five year projections, the most significant increase is slated for FY25/26, 7%. The three main influences for the FY25/26 budget increase are new projects that include rebuilding original filters, lining the sludge lagoons and building the Branders Bridge Pump Station and Ground Tank.

**APPOMATTOX RIVER WATER AUTHORITY**

Proposed: January 21, 2021

Approved:

Revised:

Revision Approved:

**PROPOSED OPERATION & MAINTENANCE BUDGET 2021/2022**

	<b>2020/2021 Revised Budget</b>	<b>FY2021/2022 Budget</b>	<b>Increase/ (Decrease) FY20/21 to FY21/22</b>
<b>O&amp;M EXPENSES</b>			
<b>41000 · Salary</b>	<b>\$1,700,000</b>	<b>\$1,836,000</b>	<b>\$136,000</b>
<b>42000 · Employee Benefits</b>	<b>\$760,200</b>	<b>\$754,100</b>	<b>-\$6,100</b>
42100 · Employer FICA	\$131,000	\$137,000	\$6,000
42200 · Virginia Retirement System	\$97,000	\$90,000	-\$7,000
42210 · Deferred Comp 457	\$7,500	\$0	-\$7,500.00
42300 · Hospitalization Insurance	\$493,100	\$490,000	-\$3,100
42400 · VRS Group Life Insurance	\$22,000	\$22,000	\$0.00
42500 · Group Term Life	\$2,100	\$2,100	\$0.00
42600 · Unemployment Insurance	\$2,000	\$1,000	-\$1,000.00
42800 · Employee Promotions	\$3,500	\$10,000	\$6,500.00
42900 · Other Fringe Benefits - EAP	\$2,000	\$2,000	\$0.00
42950 · OPEB Health Insurance Adj	\$0	\$0	\$0.00
42952 · Net Pension Adjustment			
<b>43000 · Contractual Services</b>	<b>\$1,188,000</b>	<b>\$1,049,500</b>	<b>-\$138,500</b>
43121 · Auditing Services	\$8,000	\$8,000	\$0.00
43122 · Accounting Services	\$16,000	\$16,000	\$0.00
43130 · Legal/Engineering and Reservoir Studies	\$100,000	\$50,000	-\$50,000.00
43140 · Consulting Engineers	\$85,000	\$85,000	\$0.00
43150 · Legal Services	\$75,000	\$75,000	\$0.00
43152 · Medical - Testing	\$2,500	\$2,500	\$0.00
43155 · Other Consulting Services	\$15,000	\$0	-\$15,000.00
43156 · Admin and Maintenance Svc-SCWWA	\$0	\$0	\$0.00
43160 · Trustee Services	\$9,500	\$12,000	\$2,500.00
43162 · Bank Service Charges	\$2,500	\$1,500	-\$1,000.00
43170 · Research	\$17,500	\$17,500	\$0.00
43180 · Potable Water Contract	\$510,000	\$450,000	-\$60,000.00
43190 · Samples and Tests	\$40,000	\$40,000	\$0.00
43200 · Lake Patrol	\$4,000	\$4,000	\$0.00
43201 · Reservoir Management - Invasive Control Program	\$50,000	\$50,000	\$0.00
43210 · Software Support	\$40,000	\$40,000	\$0.00
43220 · VPDES Permit Fee	\$30,000	\$15,000	-\$15,000.00
43310 · Repair Services	\$25,000	\$25,000	\$0.00
43320 · Service Contracts	\$125,000	\$125,000	\$0.00
43500 · Printing and Binding	\$3,000	\$3,000	\$0.00

43600 · Grounds Maintenance	\$30,000	\$30,000	\$0.00
<b>45000 · Other Charges</b>	<b>\$1,055,700</b>	<b>\$1,067,000</b>	<b>\$11,300</b>
45110 · Electricity - Pumping	\$500,000	\$500,000	\$0.00
45111 · Electricity - Purification	\$275,000	\$275,000	\$0.00
45120 · Heating Fuel	\$65,000	\$50,000	-\$15,000.00
45130 · Trash Pickup	\$5,500	\$5,500	\$0.00
45210 · Postal Services	\$1,200	\$1,500	\$300.00
45220 · Freight	\$15,000	\$20,000	\$5,000.00
45230 · Telecommunications	\$35,000	\$35,000	\$0.00
45308 · General Liability Insurance	\$96,000	\$100,000	\$4,000.00
45410 · Lease/Rent of Equipment	\$20,000	\$25,000	\$5,000.00
45510 · Mileage Allowance			\$0.00
45530 · Meals and Lodging	\$5,000	\$5,000	\$0.00
45540 · Education and Training	\$20,000	\$25,000	\$5,000.00
45550 · Safety Supplies	\$18,000	\$25,000	\$7,000.00
<b>46000 · Materials and Supplies</b>	<b>\$2,802,000</b>	<b>\$2,794,000</b>	<b>-\$8,000</b>
46001 · Office Supplies	\$12,000	\$12,000	\$0.00
46004 · Laboratory Supplies	\$75,000	\$77,000	\$2,000.00
46005 · Purification Chemicals	\$2,300,000	\$2,300,000	\$0.00
46006 · Purification Process and Janitorial Supplies	\$25,000	\$15,000	-\$10,000.00
46007 · Repair & Maint Supplies-Shop	\$115,000	\$115,000	\$0.00
46008 · Vehicle and Equipment Fuels	\$25,000	\$25,000	\$0.00
46009 · Vehicle and Equipment Supplies	\$20,000	\$20,000	\$0.00
46010 · Equipment Parts and Small Equipment Purchases	\$55,000	\$55,000	\$0.00
46011 · Uniforms	\$10,000	\$15,000	\$5,000.00
46012 · Dues and Subscriptions	\$25,000	\$25,000	\$0.00
46014 · Repair & Maint Supplies-IT	\$125,000	\$125,000	\$0.00
46015 · Small Equipment Purchases	\$0	\$0	\$0.00
46016 · Operations Supplies and Maintenance	\$15,000	\$10,000	-\$5,000.00
<b>Total Operating Expenses</b>	<b>\$7,505,900</b>	<b>\$7,500,600</b>	<b>(\$5,300)</b>
<b>58000 · Replacement Fund Budget</b>	<b>\$1,172,500</b>	<b>\$1,198,000</b>	<b>\$25,500</b>
Debt - 2010 Issue (Refunded as 2019 series)	\$451,220	\$0	(\$451,220)
Debt - 2012 Issue	\$301,636	\$302,013	\$377
Debt - 2017 Issue	\$1,080,517	\$1,080,414	(\$103)
Debt - 2019 Issue (2010 Refunded)	\$257,283	\$705,940	\$448,657
<b>Total Debt</b>	<b>\$2,090,656</b>	<b>\$2,088,367</b>	<b>(\$2,290)</b>
<b>Reserve Policy</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>Total Expenses</b>	<b>\$10,769,056</b>	<b>\$10,786,967</b>	<b>\$17,911</b>

**APPOMATTOX RIVER WATER AUTHORITY**  
**Replacement Fund Budget - 58000**  
**FY21/22**

Acct#	Current Budget 20/21	Proposed Budget 21/22	INFORMATIONAL & PLANNING									
			22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	
58010 - Machinery and Motors-Process	\$ 520,000	\$ 179,000	\$ 179,000	\$ 130,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
58020 - Instrumentation	\$ 40,000	\$ 281,000	\$ 90,000	\$ 100,000	\$ 90,000	\$ 45,000	\$ 25,000	\$ -	\$ -	\$ 25,000	\$ -	\$ -
58030 - SCADA	\$ 250,000	\$ -	\$ -	\$ -	\$ -	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000
58040 - Computer Equipmment	\$ 12,500	\$ -	\$ -	\$ -	\$ 12,000	\$ 13,500	\$ -	\$ -	\$ -	\$ 12,000	\$ 13,500	\$ -
58050 - Furniture and Fixtures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
58060 - Motor Vehicles	\$ -	\$ 46,000	\$ 46,000	\$ 46,000	\$ 46,000	\$ 46,000	\$ 46,000	\$ 46,000	\$ 46,000	\$ 46,000	\$ 46,000	\$ 46,000
58065 - Maintenance Equipment	\$ -	\$ 52,000	\$ 52,000	\$ 52,000	\$ 52,000	\$ 52,000	\$ 52,000	\$ 52,000	\$ 52,000	\$ 52,000	\$ 52,000	\$ 52,000
58090 - Construction	\$ 350,000	\$ 640,000	\$ 800,000	\$ 850,000	\$ 1,050,000	\$ 350,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ 75,000
<b>TOTALS:</b>	<b>\$ 1,172,500</b>	<b>\$ 1,198,000</b>	<b>\$ 1,167,000</b>	<b>\$ 1,178,000</b>	<b>\$ 1,350,000</b>	<b>\$ 616,500</b>	<b>\$ 323,000</b>	<b>\$ 198,000</b>	<b>\$ 198,000</b>	<b>\$ 235,000</b>	<b>\$ 296,500</b>	

NOTE: FY 21/22 REPLACEMENT FUND BUDGET TO BE APPROVED WITH BUDGET

**Construction Fund (Capital Projects)**  
**FY21/22**

Project Cost Estimate	Budget	Proposed Budget	INFORMATIONAL & PLANNING									
			22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	
<b>ITEM</b>	<b>20/21</b>	<b>21/22</b>	<b>22/23</b>	<b>23/24</b>	<b>24/25</b>	<b>25/26</b>	<b>26/27</b>	<b>27/28</b>	<b>28/29</b>	<b>29/30</b>	<b>30/31</b>	
2012 Bond	\$ 301,636	\$ 302,103	\$ 302,322	\$ 302,293	\$ 302,016	\$ 302,475	\$ 301,671	\$ 301,604				
2017 Bond	\$ 1,080,516	\$ 1,080,414	\$ 1,080,795	\$ 1,080,648	\$ 1,079,973	\$ 1,080,744	\$ 1,080,936	\$ 1,080,550	\$ 1,080,572	\$ 1,079,991	\$ 1,080,781	
2019 Bond (2010 Rebonding)	\$ 708,503	\$ 705,940	\$ 704,760	\$ 703,011	\$ 705,495	\$ 706,888	\$ 712,224	\$ 701,702	\$ 705,204	\$ 702,762	\$ 699,439	
Rebuild Filters 1-8 \$ 5,500,000						\$ 404,633	\$ 404,633	\$ 404,633	\$ 404,633	\$ 404,633	\$ 404,633	
Lagoon Liners \$ 8,000,000						\$ 588,558	\$ 588,558	\$ 588,558	\$ 588,558	\$ 588,558	\$ 588,558	
Branders Tank and Pump Station \$ 5,000,000						\$ 367,849	\$ 367,849	\$ 367,849	\$ 367,849	\$ 367,849	\$ 367,849	
Clearwell #4												
Pickett Rd												
Matoaca Tank												
Branders Bridge												
to Lakeview												
<b>Totals</b>	<b>\$ 2,090,655</b>	<b>\$ 2,088,456</b>	<b>\$ 2,087,876</b>	<b>\$ 2,085,952</b>	<b>\$ 2,087,483</b>	<b>\$ 3,451,146</b>	<b>\$ 3,455,871</b>	<b>\$ 3,444,895</b>	<b>\$ 3,146,816</b>	<b>\$ 3,143,793</b>	<b>\$ 3,141,259</b>	

NOTE:

- 1) The above items for information only. Approval required from BOD at time of project award.
- 2) Bond Funding will be required for these Proposed Capital Projects. Debt Service was estimated at 3% for 20 years
- 3) The PAC feed system and Lagoon lining would be regulatory driven

Total Replacement and Construction Budget											
20/21	21/22	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	
\$ 3,263,155	\$ 3,286,456	\$ 3,254,876	\$ 3,263,952	\$ 3,437,483	\$ 4,067,646	\$ 3,778,871	\$ 3,642,895	\$ 3,344,816	\$ 3,378,793	\$ 3,437,759	

		Revenues					
FY Budget Year		Appomattox River Water Authority					
2021/2022		Proposed	Jan. 21, 2021	Adopted	Revised		
		Revision Adopted					
		Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	Total
1) Operations and Maintenance Base Rate							
O&M Rate							
	\$/1000 gallons	\$ 0.9888	\$ 0.9888	\$ 0.9888	\$ 0.9888	\$ 0.9888	\$ 0.9888
Estimated (\$/quarter)	\$	1,862,469	\$ 149,235.10	\$ 104,015	\$ 427,751	\$ 65,259	\$ 2,608,729.17
Total annual allocation	\$	7,449,874	\$ 596,940	\$ 416,061	\$ 1,711,005	\$ 261,035	\$ 10,434,917
% of flows		71.394%	5.721%	3.987%	16.397%	2.502%	100.000%
Estimated (mgd)		20.642	1.654	1.153	4.741	0.723	28.913
Calc. annual usage (bg)		7.534	0.604	0.421	1.730	0.264	10.553
O&M =	\$ 7,500,600	Replacement Fund	\$ 1,198,000	54.38% 2019 Debt (maintenance)	\$ 383,890		
Int./Misc. Income	\$ 30,000	100% 2012 Debt	\$ 302,013	100% 2017 Debt	\$ 1,080,414	Reserve Policy	\$0
BASE RATE	\$/1000gals	\$ 0.9888	\$ 0.9888	\$ 0.9888	\$ 0.9888	\$ 0.9888	
2) Expansion Rate							
Bonds							
Rate (cents/1000 gals)	% Financed	\$ 0.0034	\$ 0.0307	\$ 0.4407	\$ -	\$ 0.3512	
2019 expansion (\$/year)	45.62%	\$ 25,345	\$ 18,550	\$ 185,436	\$ -	\$ 92,718	\$ 322,050
% allocation		7.87%	5.76%	57.58%	0.00%	28.79%	100.00%
FY20/21 Bond Payments	2019 refunding =	\$ 705,940					
TOTAL DEBT SERVICE RATE	\$/1000 gals	\$ 0.0034	\$ 0.0307	\$ 0.4407	\$ -	\$ 0.3512	
	\$/year	\$ 25,345	\$ 18,550	\$ 185,436	\$ -	\$ 92,718	\$ 322,050
3) Total Rate							
TOTAL RATE (BASE + EXPANSION)	\$/1000gals	\$ 0.9922	1.0195	1.4295	0.9888	1.3400	\$ 1.1540
Estimated annual charges	\$/year	\$ 7,475,220	\$ 615,490	\$ 601,497	\$ 1,711,005	\$ 353,753	\$ 10,756,967
4) Budget Comparison (see note 1)							
FY21/22 Total Rate	\$/1000 gals	\$ 0.9922	\$ 1.0195	\$ 1.4295	\$ 0.9888	\$ 1.3400	\$ 1.1540
FY 20/21 Total Rate	\$/1000 gals	\$ 0.9980	\$ 1.0254	\$ 1.4457	\$ 0.9946	\$ 1.3537	\$ 1.1635
Total Rate Difference	\$/1000 gals	\$ (0.0059)	\$ (0.0058)	\$ (0.0162)	\$ (0.0058)	\$ (0.0136)	\$ (0.0095)
Total Rate Difference	%	-0.59%	-0.57%	-1.12%	-0.59%	-1.01%	-0.82%
FY21/22 Revenues	\$/year	\$ 7,475,220	\$ 615,490	\$ 601,497	\$ 1,711,005	\$ 353,753	\$ 10,756,967
FY20/21 Revenues	\$/year	\$ 7,475,361	\$ 621,504	\$ 596,473	\$ 1,750,449	\$ 350,869	\$ 10,794,656
Annual Cash Difference	\$/year	\$ (141)	\$ (6,014)	\$ 5,024	\$ (39,443)	\$ 2,884	\$ (37,689)
Annual Revenue Difference	%	0.00%	-0.97%	0.84%	-2.25%	0.82%	-0.35%
FY 21/22 Expenses	\$ 10,786,967	FY 21/22 Income Revenue	\$ 10,786,967				

NOTES:

#### Reserve Policy: Appomattox River Water Authority FY21/22

Reserve Policy Calculation

ARWA O&M Budget	Reserves as of 6/30/2020	Revenue for FY2020/2021	Total expected reserves on 6/30/2021	Recommended 50% O&M Reserves	Annual Charge to achieve 50% Reserves
\$7,500,600	\$3,784,839	\$15,600	\$3,800,439	\$3,750,300	\$0



# **ARWA Budget comparisons**

Year	O&M Expenses	Replacement Fund	Debt Service 2010 issue	Debt Service 2012 issue	Debt Service 2017 issue	(1) Debt Service 2019 issue	(2) Debt Service 2026 issue	Reserve Policy	Total	Difference	% change	Comments
20/21	\$ 7,505,900.00	\$ 1,172,500.00	\$ 451,220.00	\$ 301,636.00	\$ 1,080,517.00	\$ 257,283.00		\$ -	\$ 10,769,056.00			
21/22	\$ 7,500,600.00	\$ 1,198,000.00		\$ 302,013.00	\$ 1,080,414.00	\$ 705,940.00		\$ -	\$ 10,786,967.00	\$ 17,911.00	0%	
22/23	\$ 7,725,618.00	\$ 1,167,000.00		\$ 302,322.00	\$ 1,080,795.00	\$ 704,760.00		\$ 62,369.54	\$ 11,042,864.54	\$ 255,897.54	2%	Reserve Fund is 50% of O&M
23/24	\$ 7,957,386.54	\$ 1,178,000.00		\$ 302,293.00	\$ 1,080,648.00	\$ 703,011.00		\$ 115,884.27	\$ 11,337,222.81	\$ 294,358.27	3%	
24/25	\$ 8,196,108.14	\$ 1,350,000.00		\$ 302,016.00	\$ 1,079,973.00	\$ 705,495.00		\$ 119,360.80	\$ 11,752,952.93	\$ 415,730.12	4%	
25/26	\$ 8,441,991.38	\$ 616,500.00		\$ 302,475.00	\$ 1,080,744.00	\$ 706,888.00	\$ 1,361,040.00	\$ 122,941.62	\$ 12,632,580.00	\$ 879,627.07	7%	took PAC out of 25/26 debt service

Notes:

(1) The 2010 issue was refinanced with the 2019 issue.

(2) The proposed debt service shown in 25/26 represents:

Rebuild filters	\$ 404,633.00	replace filters 1-8, end of life - \$5.5M
Lagoon Liner	\$ 588,558.00	regulatory driven by DEQ based on groundwater monitoring program - \$8.0M
Branders PS	\$ 367,849.00	pump station and ground tank on eastern leg - \$5.0M

## **ARWA Projected Annual Cost**

### **5 year projections - O&M, Replacement Fund, Reserve Policy, 54.38% 2019 Series, 2012 Series, and 2017 Series**

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	total
	71.394%	5.721%	3.987%	16.397%	2.502%	100.000%
FY 22/23	\$ 7,654,372	\$ 613,326	\$ 427,482	\$ 1,757,972	\$ 268,201	\$ 10,721,353
FY 23/24	\$ 7,865,095	\$ 630,211	\$ 439,250	\$ 1,806,369	\$ 275,584	\$ 11,016,509
FY 24/25	\$ 8,161,091	\$ 653,928	\$ 455,781	\$ 1,874,350	\$ 285,956	\$ 11,431,106
FY 25/26	\$ 8,788,636	\$ 704,212	\$ 490,828	\$ 2,018,478	\$ 307,944	\$ 12,310,098

Note: Budget % based on five year average flow consumption (FY15/16 to FY19/20)

### **5 year projections -2019 Series Debt Service (45.62%)**

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	total
Allocation	7.870%	5.760%	57.580%	0.000%	28.790%	100.000%
FY 22/23	\$ 25,303	\$ 18,519	\$ 185,126	\$ -	\$ 92,563	\$ 321,512
FY 23/24	\$ 25,240	\$ 18,473	\$ 184,667	\$ -	\$ 92,333	\$ 320,714
FY 24/25	\$ 25,329	\$ 18,538	\$ 185,319	\$ -	\$ 92,660	\$ 321,847
FY 25/26	\$ 25,379	\$ 18,575	\$ 185,685	\$ -	\$ 92,843	\$ 322,482

### **5 year projections - \$/year**

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	TOTAL
FY 22/23	\$ 7,679,675	\$ 631,845	\$ 612,608	\$ 1,757,972	\$ 360,764	\$ 11,042,865
FY 23/24	\$ 7,890,335	\$ 648,684	\$ 623,917	\$ 1,806,369	\$ 367,918	\$ 11,337,223
FY 24/25	\$ 8,186,420	\$ 672,467	\$ 641,100	\$ 1,874,350	\$ 378,615	\$ 11,752,953
FY 25/26	\$ 8,814,015	\$ 722,787	\$ 676,514	\$ 2,018,478	\$ 400,787	\$ 12,632,580

### **5 year projections - \$/1000 gallons**

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	Average
Annual consumptions (1000 gallons)				10,553,117		
Five year a	71.394%	5.721%	3.987%	16.397%	2.502%	
FY 22/23	\$ 1.0193	\$ 1.0466	\$ 1.4559	\$ 1.0159	\$ 1.3666	\$ 1.1809
FY 23/24	\$ 1.0473	\$ 1.0745	\$ 1.4828	\$ 1.0439	\$ 1.3937	\$ 1.2084
FY 24/25	\$ 1.0866	\$ 1.1139	\$ 1.5236	\$ 1.0832	\$ 1.4342	\$ 1.2483
FY 25/26	\$ 1.1699	\$ 1.1973	\$ 1.6078	\$ 1.1665	\$ 1.5182	\$ 1.3319

## **Exhibit E**

### **Appomattox River Water Authority Work Plan Initiation Date July 2020 Six Month Update – January 21, 2021**

#### **Vision**

To provide extraordinary customer service to the member jurisdictions and their customers and be recognized as a community partner that provides exceptional water services.

#### **Plant Staff:**

The Appomattox River Water Authority also known as ARWA provides water services and customer support to five jurisdictions: Chesterfield County, Dinwiddie County, Prince George County, the City of Petersburg and the City of Colonial Heights. The ARWA staff consists of 31 dedicated professionals in the water industry. The team is divided into five departments: Administration, Operations, Maintenance, Laboratory, and IT. Each department is an integral part of the overall operation and committed to the values listed below.

#### **Values**

To provide extraordinary customer service, we are committed to the following principles:

- Open Communication
- Transparency
- Regional cooperation
- Teamwork
- Respect
- Quality

#### **Board Items:**

- Development of a Technical Advisory Committee (TAC) – jurisdictional engineers.
- Completion of Service Amendment #4.
- Source Water Expansion.
- Bylaw review/revisions.
- Brander's Bridge Pump Station and Ground Tank. This project is being proposed for consideration in 2025/2026. This is also included in the FY21/22 Budget Narrative. This project is contingent on two of the participating jurisdictions developing additional water supplies on the lower Appomattox River. Additional discussion will be required.
- Plant and Reservoir Tours.

#### **Budgeted FY21 Projects:**

- Complete Phase I In-plant project punch list. Substantial completion issued April 22, 2020. Phase I is complete.
- Complete Phase II In-plant projects. The major items for Phase II include new conduit runs through the tunnel to provide a new power feed the east side of the plant, additional sodium hypochlorite storage (two tanks) and adding a roofing system over the chlorine dioxide system. Substantial completion issued September 12, 2020. Change Order issued November 19, 2020 to add additional butterfly control valves and surge relief for FWPS1 and FWPS2. This project will probably run through the fall of 2021 as a result of the long lead times for the valves.
- Replacing the Prince George meter at the intersection of Temple Avenue and Charles Dimmock Parkway. Construction contract signed September 16, 2020. Notice to proceed issued November 2, 2020. The underground pipe has been installed and taps made. We have run into a soil bearing issue for the vault – dug into trash cell. We are getting proposals for helical anchors to support the vault.
- Replacing the venturi flow meters on filters 5 through 8 with Krohne mag meters. This replacement is being performed in-house by maintenance staff and IT staff. Magmeters and materials ordered October 26, 2020. Maintenance and IT staff will install this winter.
- Upgrading the SCADA System. This project will upgrade/replace the SCADA host system. We are evaluating the same host system used at SCWWA to see if it would meet the operational needs for ARWA. One of the main issues for ARWA is the ability to track historical information and trends, i.e., reporting. IT staff (shared services) could then support both systems. Emerge has provided a formal submittal for two host systems, GE Solutions and Aveva. We have issued the purchase order to develop a pilot program with GE Solutions. This is the same host software being used at SCWWA.
- Installation of HMI's (human machine interfaces – *touch screens*) on the Raw and Chlorine PLC's (programmable logic controllers – minicomputers). Our systems integrator vendor, Emerge, will be submitting a proposal for these installations.
- PLC replacement for the Rapid Mix and Ammonia control cabinets. Purchase orders issued to Emerge for each PLC replacement. The ammonia PLC has been installed and is currently being tested. The control cabinet slab modifications have been poured for Rapid Mix. The Rapid Mix PLC is being wired and tested.
- Implementing the security and safety improvements outlined in the AWIA Risk and Resilience Assessment. WR&A is preparing a list of suggested vendors for security upgrades to the plant. An in-house committee will select a system and vendor.
- Purchasing long lead time and mission critical spare parts – spare motors for Raw Water Pump Station 2 (RWPS2) – 300 and 600 hp and Finished Water Pump Station 2 (FWPS2) - 250 hp, rapid mixer, and transmission main repair materials. Laydown yard under construction. Pump motors, rapid mixer and transmission materials purchased.
- Replacing the Atomic Absorption (AA) Analyzer in the laboratory. The AA Analyzer is used for metal analysis of copper, iron, and manganese. The analyzer is primarily used for manganese which is a secondary contaminant that can cause discolored water. Perkins/Elmer AA has been delivered and placed in service.

- Add pandemic/epidemic section to the Emergency Action Plan. Pandemic/epidemic section to EAP was authored in-house and added to the Employee Policy Manual.
- Hydrilla Plan. Schedule public participation for hydrilla education and management plan. Continue monitoring and data gathering. Brochure has been completed. Mailing lists provided by Chesterfield County and Dinwiddie County. Brochures have been mailed to property owners around the lake. We are beginning to receive inquiries from residents around the lake. We still need to initiate public information meetings.
- Quarterly groundwater monitoring to determine remediation efforts for backwash lagoons and development of future lagoons. This is a VPDES requirement. Ongoing. Four of the eight sampling events have been completed. We are sampling quarterly. After completion of the required sampling (two years), we will have to produce a report for DEQ. We will need some assistance from Golder and Associates to review the data and create the report. This project is also discussed in the FY21/22 Budget Narrative. An appropriation is being shown in 2025/2026 to create a third lagoon and line the two existing lagoons. We think this will be a regulatory requirement.

#### **Member Support:**

- Customer service support on quality questions.
- Monthly Bac-t testing per each members Bac-t sampling plan.
- Bac-t testing for new construction.
- Assistance with water break testing – fluoride testing/tracing.
- Consumer Confidence Report

#### **On-going Projects:**

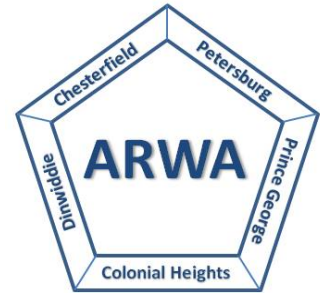
- Asset management. Determine the useful life of equipment and factor into the capital improvement program (CIP). Develop a program for tracking equipment removed from operation and tracking operational readiness. Develop formal criteria for repair versus replacement.
- Data management. Determine archiving and compliance requirements. Develop a scanning and electronic data management plan.
- Update the five and ten year capital improvement program – annual basis. We are working on the five and ten year CIP as part of the budget process. We are also identifying projects in the AMI (annual maintenance inspection) report.
- Develop a strategy for stabilizing rates. As part of the budget process we are investigating strategies for stabilizing rates. We have added a table to track capital projects and debt service for larger, bonded projects. We are also requesting annual appropriations for vehicle and equipment replacement. This is also discussed in the FY21/22 Budget Narrative.
- Tabletop exercises. Develop various catastrophic scenarios and determine if the current Emergency Action Plan and Standard Operating Procedures (SOP's) address how to react to the scenario. The annual dam failure exercise was completed December 18<sup>th</sup>.

- Develop one line diagrams for the new plant power distribution. **One line power distribution drawings are included in the In-plant Phase I and II record drawings.**
- Set up/compile spreadsheets to identify which PLC cabinet controls which function. **This is being implemented as part of the ammonia and rapid mix PLC replacements.**
- Evaluate the power schedules to determine if new power schedules would save money with the installation of the new variable frequency drives (VFD's).
- Ensure that appropriate employee development, succession planning and business continuity is in place and documented. **The assistant executive director and I have met with the operations manager and begun establishing the criteria and foundation for maintaining licensed operators. Formal policies have been reviewed and revised with time and class requirements and financial reimbursement. We are also working with the maintenance chief to develop succession plans for supervision. A new maintenance supervisor was hired in October.**
- Determine what information needs to be expressed on the website. Also determine what type of information needs to be removed from the website.
- Determine what information members want to see and on what frequency.
- Develop a staffing and attrition plan. Consider a high school training program.

#### **Permits and Important Dates:**

- Lab Certification Audit by Virginia Department of Health (VDH) March 2021.
- The current Virginia Water Protection Permit expires on October 31, 2028. The renewal process will begin in 2025 with discussions with DEQ to determine what plans and studies will be necessary to renew the permit.
- The Virginia Pollution Discharge Elimination System (VPDES) permit VA0005819, for the two outfalls – lagoons and plant drainage to Lake Chesdin, and the groundwater sampling for the lagoons expires on April 30, 2023. The renewal process will start in 2022 approximately one before expiration. **This is in discussion above on the lagoon monitoring.**
- The FERC permit for Krueger to generate power at the dam expires in 2032. **Additional discussion on this permit is included in the FY21/22 Budget Narrative. The Authority will need to take formal action by January 1, 20226 to extend the lease for Krueger.**
- Permit for the 2 megawatt standby diesel generator – annual permit reporting.

# Appomattox River Water Authority



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21300 Chesdin Rd. - S. Chesterfield, VA 23803 - Phone (804) 590-1145 - Fax (804) 590-9285

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## Exhibit F

TO: Appomattox River Authority Board of Directors

FROM: Robert B. Wilson, P.E., Executive Director  
James C. Gordon, Assistant Executive Director

DATE: January 21, 2020

SUBJECT: Ongoing Projects\Operations

### Operating Status Report

This report hits the highlights and does not cover the day to day operations, maintenance or preventive maintenance summaries.

#### ➤ General

- The next scheduled Board of Directors Meeting is Thursday, March 18, 2021. Staff requests the venue be moved to the Appomattox River Water Authority at 2:00 pm for this meeting due to social distancing related to COVID-19.
- We met with the utility directors via teleconference on December 9<sup>th</sup> to review and discuss the draft FY21/22 budget.
- The invitation for chemical bids went out December 9<sup>th</sup> and bids were received January 14<sup>th</sup>. Results of the bids are available for any member that would like a copy.
- The draft annual maintenance inspection (AMI) has been reviewed with comments sent to the consultant for incorporation into the final document.

#### ➤ Operations

- Finished water met all permit requirements for November and December.
- Submitted annual river flow report.
- The average daily finished water consumption for November was 32.1 mgd and the total delivered was 962 BG. The average daily finished water consumption for December was 29.6 mgd and the total delivered was 916 BG.
- With the excessive rain for November and December, the elevated raw turbidities were 24.6 NTU for November and 42.4 NTU for December.
- Worked with IT staff and SCADA vendor on the installation and commissioning of ammonia

PLC upgrade.

➤ Maintenance

- Found buyer for surplus Detroit, 2 stroke, 4160 generator. Purchaser, A&N Electric Cooperative, is using it for backup power to Tangier Island. A&N contracted with Carter Machinery who came in and load tested generator – passed with flying colors. A&N is responsible for removing generator and resetting enclosure. Staff assisting with disassembly of electrical conduit inside enclosure.
- New SEL power meters installed on switchgear.
- Pipeline survey/inspection complete.
- Safety rails added on plant side of dam abutment.
- Safety walkout installed at Outfall 004 for laboratory staff. This is the outfall for the waste lagoons.
- 95% of work orders and PM's completed.

➤ Instrumentation

- Selected host system for SCADA, GE Solutions. Vendor is setting up a pilot system for review and comment. IT manager is project manager.
- Added two new Domain controllers replacing unsupported MS Server 2008 models.
- New Domain trust set up between ARWA and SCWWA for smoother shared resources.
- Ammonia PLC installed and being tested.
- Working with our SCADA vendor on replacing the outdated PLC cabinet for Rapid Mix.
- Working with power consultant to install arc flash protection in 4160 switchgear at dam.
- Having contractor install solar powered camera on Dinwiddie Side of dam.

➤ Laboratory

- Met all the VPDES requirements for November and December for the outfalls.
- Met monthly requirements for VDH report submittals.
- Supporting members on bac-t samples.
- Ongoing groundwater monitoring for lagoons.

➤ Phase I In-plant Project

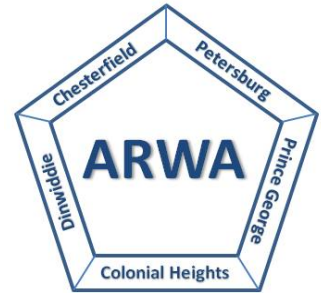
- Complete and closed out.

➤ Phase II In-plant Project

- Substantial completion issued on September 12, 2020.
- At the November 19<sup>th</sup> meeting received Board approval for change order to install two electrically actuated butterfly valves and add surge relief to FWPS1 and FWPS2.

- Authority purchasing materials – proposals sent out.
- 30” Transmission Fortification
- Purchase order has been issued to contractor. Waiting for a dryer time to minimize the pumping around operation.
  - Water line checked during heavy rains – no visible issues.
- Prince George Meter Replacement
- Notice to proceed issued November 2, 2020.
  - Taps and pipe installed.
  - Working through foundation issues for meter vault. While digging the footer for the vault the contractor encountered a trash cell. The contractor is getting pricing for helical anchors to support the vault.
- Hydrilla
- Hydrilla brochure completed. Chesterfield County and Dinwiddie County provided address lists for residents on both sides of the lake. Consultant, Golder & Associates, mailed the brochure to residents. We are beginning to receive inquiries.
  - We still have to distribute brochures to marinas and campgrounds.
- Docks
- No new dock permits for this reporting period.
- Miscellaneous
- Calendar year 2020 is the third highest rainfall on record since records have been kept.
  - With extreme amount of rainfall for 2020 we did not have computer model simulations performed for the lake. This is usually an annual exercise.
  - We received an inquiry from a duck hunter to hunt Goose Island. Goose Island is an island on the river just west of Whippernock Swamp (west of Chesdin Landing) owned by the Authority. I advised the hunter he could hunt from the water to the 164’ contour. The property was posted with ARWA as the owner. That is the reason he called my office.





**Exhibit G**

For more information contact:  
Robert Wilson, Executive Director  
(804) 590-1145

## **ARWA Announces 2021 Schedule for Annual Water Transmission System Flushing Program**

The Appomattox River Water Authority (ARWA) is scheduled to flush its transmission lines from March 23<sup>rd</sup> to March 25<sup>th</sup>. If inclement weather occurs, the flushing will be pushed back to March 30<sup>th</sup> to April 1<sup>st</sup>.

For more than twenty-five years, ARWA has annually flushed out its water transmission lines to ensure the highest quality water and availability to all ARWA customers. This process is completed by ARWA staff each year.

While it is possible for this maintenance process to create some discoloration of water in isolated situations, it will have no adverse effect on the quality or safety of drinking water.

ARWA customers with questions or concerns about the waterline flushing program are encouraged to call ARWA at 590-1145 or contact their local water service provider directly.

\* \* \*

### **About ARWA**

The Appomattox River Water Authority (ARWA) provides safe, reliable, clean water to customers in Chesterfield, Dinwiddie and Prince George Counties, and the Cities of Colonial Heights and Petersburg, Virginia, from facilities located next to Brasfield Dam, at the Chesdin Reservoir. For more information about ARWA, please visit <http://arwava.org/>

**Appomattox River Water Authority-Balance Sheet**  
For Month Ending December 31, 2020

**Assets****Current Assets**

Petty Cash	\$	400
SunTrust Operating Fund	\$	2,198,631
SunTrust Replacement Fund	\$	-
<b>Total Unrestricted Cash</b>	<b>\$</b>	<b>2,199,031</b>

Water Revenue	\$	6,927,454
Reserve Account	\$	3,847,746
Replacement Account	\$	457,629
Debt Service Reserve	\$	2,141,222
Bond Principal/Interest	\$	450,118
Bond Construction	\$	1,076,944
<b>Total Restricted Cash</b>	<b>\$</b>	<b>14,901,114</b>

**Total Checking/Savings** **\$ 17,100,145**

Accounts Receivable	\$	3,158,780
Other Current Assets	\$	515
Inventory	\$	296,179

**Total Current Assets** **\$ 20,555,618**

**Fixed Assets**

Land and Land Rights	\$	1,044,167
Water System	\$	85,599,031
Equipment	\$	1,708,459
Hydro	\$	34,873
Construction in Progress	\$	11,720,554
Accumulated Amortization	\$	(34,873)
Accumulated Depreciation	\$	(51,620,296)
<b>Total Fixed Assets</b>	<b>\$</b>	<b>48,451,914</b>

**Other Assets**

Def Out Res-Post ER Pension Costs	\$	61,836
Deferred Outflow-OPEB GLI	\$	27,370
Def Out Res-Net Dif Pension Inv	\$	-
<b>Total Other Assets</b>	<b>\$</b>	<b>89,206</b>

**Total Assets** **\$ 69,096,738**

**Liabilities & Equity****Current Liabilities**

Accounts Payable	\$	345,710
Retainage Payable	\$	175,442
Accrued Interest Payable	\$	139,596

**Total Current Liabilities** **\$ 660,748**

**Long Term Liabilities**

Def Inf Res-Net Dif Pension Inv	\$	289,931
Def Inf Res-Pen Chg Assumptions	\$	(69,688)
Def Inf Res-Pens Dif Proj/Act E	\$	55,697
Net Pension Liability	\$	(477,262)
Def Infl-OPEB Chg of Assumptions	\$	176
Deferred Inflow-OPEB GLI	\$	9,788
Deferred Inflow-Expect & Actual	\$	16,819
Bonds Payable-2010	\$	4,139
Bonds Payable-2012	\$	2,140,000
Bonds Payable-2017	\$	11,192,000
Bonds Payable-2019 Refunding Bond Payment	\$	6,730,000
Bonds Payable-2019 Def Amt on Refunding	\$	(99,946)
Accrued Leave Payable	\$	185,257
Post Employment Benefit	\$	79,079
OPEB Liability-GLI	\$	129,368

**Total Long-Term Liabilities** **\$ 20,185,358**

**Total Liabilities** **\$ 20,846,107**

**Equity**

Retained Earnings	\$	(230,175)
Reserve for Operations	\$	3,675,319
Reserve for Water Revenue	\$	6,093,832
Reserve for Replacements	\$	500,000
Reserve for Bond Interest	\$	139,604
Reserve for Debt Service	\$	2,090,663
Reserve for Bond Principal	\$	1,558,000
Reserve for Reserve	\$	3,785,013
Fixed Assets, Net of Debt	\$	29,000,143

Net Income	\$	1,638,233
	\$	48,250,631

**Total Liabilities & Equity** **\$ 69,096,738**

\$ -

Appomattox River Water Authority  
YTD Income Statement for the period ending December 31, 2020

Water Rate Center

Revenues and Expenses Summary

<i>Budget</i>	<i>Budget</i>	<i>Actual</i>	<i>YTD Budget</i>	<i>Variance</i>
<i>FY 20/21</i>	<i>Year-to-Date</i>	<i>Year-to-Date</i>	<i>vs. Actual</i>	<i>Percentage</i>

**Operating Budget vs. Actual**

**Revenues**

Water Sales	\$ 10,794,656	\$ 5,397,328	\$ 6,643,902	\$ 1,246,574	23.10%
Rent/Misc. Income	\$ 30,000	\$ 15,000	\$ 8,487	\$ (6,513)	-43.42%
<b>Total Operating Revenues</b>	<b>\$ 10,824,656</b>	<b>\$ 5,412,328</b>	<b>\$ 6,652,389</b>	<b>\$ 1,240,061</b>	<b>22.91%</b>

**Expenses**

Personnel Cost	\$ 2,460,200	\$ 1,230,100	\$ 1,078,752	\$ (151,348)	-12.30%
Contractual/Professional Services	\$ 1,188,000	\$ 594,000	\$ 448,491	\$ (145,510)	-24.50%
Utilities	\$ 845,500	\$ 422,750	\$ 442,230	\$ 19,480	4.61%
Communication/Postal/Freight	\$ 51,200	\$ 25,600	\$ 21,187	\$ (4,413)	-17.24%
Office/Lab/Janitorial Supplies	\$ 112,000	\$ 56,000	\$ 44,615	\$ (11,385)	-20.33%
Insurance	\$ 96,000	\$ 96,000	\$ 95,969	\$ (31)	-0.03%
Lease/Rental Equipment	\$ 20,000	\$ 10,000	\$ 9,185	\$ (815)	-8.15%
Travel/Training/Dues	\$ 50,000	\$ 25,000	\$ 11,893	\$ (13,107)	-52.43%
Safety/Uniforms	\$ 28,000	\$ 14,000	\$ 18,128	\$ 4,128	29.49%
Chemicals	\$ 2,300,000	\$ 1,150,000	\$ 1,275,802	\$ 125,802	10.94%
Repair/Maintenance Parts & Supplies	\$ 355,000	\$ 177,500	\$ 149,639	\$ (27,861)	-15.70%
<b>Total Operating Expenses</b>	<b>\$ 7,505,900</b>	<b>\$ 3,800,950</b>	<b>\$ 3,595,892</b>	<b>\$ (205,058)</b>	<b>-5.39%</b>
<b>Operating Results Suplus/(Deficit)</b>	<b>\$ 3,318,756</b>	<b>\$ 1,611,378</b>	<b>\$ 3,056,497</b>	<b>\$ 1,445,119</b>	<b>89.68%</b>

**Replacement Outlay Budget vs. Actual**

Machinery & Motors	\$ 520,000	\$ 260,000	\$ 16,724	\$ (243,276)	-93.57%
Instrumentation	\$ 40,000	\$ 20,000	\$ 33,005	\$ 13,005	65.02%
SCADA	\$ 250,000	\$ 125,000	\$ -	\$ (125,000)	-100.00%
Computer Equipment	\$ 12,500	\$ 6,250	\$ 12,321	\$ 6,071	97.14%
Motor Vehicles	\$ 40,000	\$ 20,000	\$ -	\$ (20,000)	-100.00%
Valve Replacement	\$ 100,000	\$ 50,000	\$ 45,728	\$ (4,272)	-8.54%
Security Infrastructure Upgrade	\$ 250,000	\$ 125,000	\$ 10,924	\$ (114,076)	-91.26%
PG Meter Vault	\$ -	\$ -	\$ 125,287	\$ 125,287	#DIV/0!
<b>Total Capital Outlay</b>	<b>\$ 1,212,500</b>	<b>\$ 606,250</b>	<b>\$ 243,989</b>	<b>\$ (362,261)</b>	<b>-59.75%</b>

**Construction Outlay Budget vs. Actual**

In-Plant Capital Upgrade	\$ -	\$ -	\$ 659,720	\$ 659,720	#DIV/0!
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**Debt Service Budget vs. Actual**

Interest Income	\$ -	\$ -	\$ 3,619	\$ 3,619	#DIV/0!
Other (Income)	\$ -	\$ -	\$ 17	\$ 17	#DIV/0!
Interest Expense	\$ 532,655	\$ 532,655	\$ 279,192	\$ (253,463)	-47.58%
Bond Issuance Cost	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Principal Payments	\$ 1,558,000	\$ 1,558,000	\$ 239,000	\$ (1,319,000)	-84.66%

**Other Income/Other Expense**

Alum Litigation Proceeds-Received YTD	\$ -	\$ -	\$ 438,692	\$ 438,692	#DIV/0!
Alum Litigation Proceeds-Credited to Members YTD	\$ -	\$ -	\$ 438,692	\$ 438,692	#DIV/0!

**Appomattox River Water Authority  
Executive Review  
Cash And Debt Highlights  
As of December 31, 2020**

<b>Highlights: ARWA Cash Positions</b>		<b>30-Jun-20</b>	<b>31-Dec-20</b>	<b>Change</b>	<b>Explanation</b>
Unrestricted Cash & Investments:					
Petty Cash	\$	400.00	\$ 400.00	\$ -	see explanation (a) below
SunTrust Operating Account	\$	2,812,184.00	\$ 2,198,630.80	\$ (613,553.20)	see explanation (b) below
SunTrust Replacement Fund	\$	2.70	\$ -	\$ (2.70)	see explanation (c) below
Restricted Cash and Investments:					
Water Revenue	\$	4,919,509.91	\$ 6,927,454.35	\$ 2,007,944.44	see explanation (d) below
Reserve Account	\$	3,784,839.46	\$ 3,847,745.86	\$ 62,906.40	see explanation (e) below
Replacement Account	\$	434,099.50	\$ 457,628.87	\$ 23,529.37	see explanation (f) below
Debt Service Reserve	\$	2,141,333.97	\$ 2,141,222.25	\$ (111.72)	see explanation (g) below
2010 Bond Principal/Interest	\$	390,235.20	\$ 12.97	\$ (390,222.23)	
2012 Bond Principal/Interest	\$	215,765.23	\$ 96,999.93	\$ (118,765.30)	
2017 Bond Principal/Interest	\$	747,404.34	\$ 353,105.38	\$ (394,298.96)	
2019 Bond Principal/Interest	\$	-	\$ -	\$ -	
2017 Construction	\$	1,956,769.11	\$ 1,076,944.26	\$ (879,824.85)	
<b>Total Cash and Investments</b>	<b>\$</b>	<b>17,402,543.42</b>	<b>\$ 17,100,144.67</b>	<b>\$ (302,398.75)</b>	

<b>Highlights: ARWA Outstanding Bonds</b>		<b>30-Jun-20</b>	<b>31-Dec-20</b>	<b>Change</b>
2010 Bond	\$	440,000.00	\$ -	\$ (440,000.00)
2010 Bond-Def Amt on Refund	\$	(33,556.22)	\$ (33,556.22)	\$ -
2010 Bond-Premium	\$	37,695.22	\$ 37,695.22	\$ -
2012 Bond	\$	2,140,000.00	\$ 2,140,000.00	\$ -
2017 Bond	\$	11,981,000.00	\$ 11,192,000.00	\$ (789,000.00)
2019 Bond	\$	6,820,000.00	\$ 6,730,000.00	\$ (90,000.00)
2019 Bond-Def Amt on Refund	\$	(99,945.89)	\$ (99,945.89)	\$ -
<b>Total Bonds Outstanding</b>	<b>\$</b>	<b>21,285,193.11</b>	<b>\$ 19,966,193.11</b>	<b>\$ (1,319,000.00)</b>

**Explanation of Unrestricted and Restricted Cash positions:**

- a. On-Hand Petty Cash for incidental expenses
- b. Financial Policy: Based on next four months of O&M expense
- c. Pass-through account: From US Bank to SunTrust Bank for Replacement Fund Requisitions
- d. Financial Policy: Held by Trustee for all operating water revenues
- e. Financial Policy: 50% of current FY O&M Budget
- f. Financial Policy: Must maintain a minimum of \$500K
- g. Financial Policy: Held by Trustee, funded at such amount as may be necessary.

[illegible]