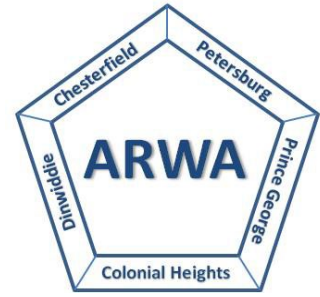


Appomattox River Water Authority



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

APPOMATTOX RIVER WATER AUTHORITY

Board of Directors Meeting

DATE: March 16, 2023

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 January 26, 2023 (Exhibit A, Pages 2 to 5)
3. Public Comment (Exhibit B, Page 6)
4. Executive Director's Report:
 - FY23/24 Budget presentation (Exhibit C, Pages 7 to 45)
 - Status Report (Exhibit D, Pages 46 to 51)
 - Financials (Exhibit E, Pages 52 to 57)
5. Items from Counsel
6. Closed Meeting
7. Other items from Board Members/Staff Not on Agenda
8. Adjourn

Exhibit A

BOARD OF DIRECTORS MEETING
Appomattox River Water Authority
January 26, 2023, at 2:00 p.m.
Location: Appomattox River Water Authority
21300 Chesdin Road, South Chesterfield, VA 23803

MEMBERS PRESENT:

Doug Smith, Chairman (Colonial Heights)
Kevin Massengill, Vice-Chairman (Dinwiddie)
Joseph Casey, (Chesterfield)
Jeff Stoke, (Prince George)

STAFF PRESENT:

Robert B. Wilson, Executive Director, (ARWA & SCWWA)
James C. Gordon, Asst. Executive Director (ARWA & SCWWA)
Arthur Anderson, (McGuireWoods)
Melissa Wilkins, Business Manager/FOIA (ARWA & SCWWA)

ALTERNATES PRESENT:

George Hayes, (Alternate, Chesterfield)
Matt Rembold, (Alternate, Chesterfield)
Tangela Innis, (Alternate, Petersburg)
Eddie Pearson, (Alternate, Dinwiddie)

OTHERS PRESENT:

Wendy Austin, (FOLAR)

ABSENT:

Frank Haltom, Secretary/Treasurer (Alternate, Prince George)
March Altman, (Petersburg)
Todd Flippin, (Alternate, Colonial Heights)

The ARWA meeting was called to order by Mr. Smith, Chairman, at 2:13 p.m.

1. Call to Order/Roll Call

The roll was called:	Doug Smith	Present
	Kevin Massengill	Present
	Joseph Casey	Present
	Jeff Stoke	Present
	Tangela Innis	Present

2. Approval of Minutes: Minutes of the Regular Meeting of the Board on November 17, 2022

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

RESOLVED, that the Minutes of the Regular Meeting of the Board on November 17, 2022, are hereby approved:

For: 5 Against: 0 Abstain: 0

3. Public Comment

Mr. Smith introduced Ms. Wendy Austin who is with the FOLAR. There were no other Public Comments.

4. Executive Director's Report:

- FY23/24 Budget Presentation**

Mr. Wilson presented the budget narrative that included the original budget as presented to the Utility Directors on January 4, 2023, along with the revisions, and the requested 1A budget that we recommend for advertisement. He stated we are requesting a 7.5% salary adjustment. At the directors meeting, the directors indicated that a 7.5% salary adjustment was very optimistic. Mr. Wilson stated we are requesting direction on the requested salary adjustment.

Dr. Casey stated if salaries are different from what they are doing, then he needs a narrative to know why. He stated VRS sent a message that costs are going down.

Mr. Stoke stated he could be supportive of a 5% salary adjustment considering what they are doing in Prince George.

Mr. Smith stated he was in the same spot as Mr. Stokes. He doesn't know what their budget is going to look like. Last year they did 5%, but probably not feasible for them to get up to that level for general employees in the next fiscal year. He is okay with keeping the requested salary adjustment in the advertised budgets, and they will discuss further at the upcoming public hearing.

Ms. Innis stated Petersburg gave their employees 5% last year and doesn't know if they will be giving any more this year. Mr. Altman didn't give her anything additional to add.

Mr. Massengill stated Dinwiddie is open to further discussion on the salary adjustment. He requested additional detail on how the proposed 7.5% salary adjustment was derived. For the purpose of advertising the budget, he prefers to advertise the budget with the most impact.

Mr. Smith asked Mr. Wilson to go over what they had previously discussed for adjusting the salary ranges for inflation and compression. Mr. Wilson stated that they went through the compensation plan and the compression issue was resolved. The Chairman asked him if we were modifying the salaries this year for inflation. Mr. Wilson stated we are not requesting an adjustment to the salary ranges for inflation. He was looking at reviewing the salary scales in five years but that may need to be accomplished sooner, say two to three years. He further stated we sat down with Chesterfield's HR and compared the scales. Chesterfield's HR signed off on the Authority's methodology and scales. The Authority has fifteen-year scales and Chesterfield has thirty-year scales. If inflation or the markets keep going up before we get to year five, we will need to review our salary scales. Dr. Casey stated when you talk about the pay scales there is a beginning and an end, and there is a percent differential between the two. Whatever Chesterfield's differential may be, it is a broader range than ARWA's. He stated an employee must get to midpoint by a certain time. They bring new people in with experience, and they use the midpoint. Mr. Wilson stated we don't expect someone to stay in the same position for fifteen years, as we expect them to move up. When the Authority brings in a new employee, we consider their experience. For operators, we make sure that as new employees get licenses, they do not pass existing operators with experience and same licensure.

Mr. Smith stated another item here is to discuss the Tank Study. Dr. Casey asked if the pressure that is yielded off this tank was strong enough to push water to Prince George County, and Mr. Wilson answered yes. Dr. Casey asked what the gallon capacity of the tank would be, and Mr. Wilson stated we recommend two 2.5 million gallon tanks for a total of 5.0 million gallons. Board members are supportive of Tank Study.

Mr. Wilson stated if everyone is comfortable, Mr. Anderson has circulated a Resolution to advertise the rates with the highest impact, and we request that the Board consider that Resolution. Dr. Casey stated this may confuse people when it's advertised that this rate is what a customer rate change would be. Mr. Anderson stated we have condensed what we advertise because all you really must publish are the rates. Mr. Wilson stated we will be clear that this is a wholesale rate. Mr. Anderson stated in the General Assembly there is a reform of the public hearing process, and we may just be able to publish it on the website. Dr. Casey asked what publication was used for this advertisement and Ms. Wilkins replied it was The Progress-Index.

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

RESOLVED, that the Board approves the advertising of 1A of the FY23/24 Budget with a public hearing date for March 16, 2023 at 2:00 p.m. at the Appomattox River Water Authority:

For: 5 Against: 0 Abstain: 0

Doug Smith	Aye
Kevin Massengill	Aye
Joseph Casey	Aye
Jeff Stoke	Aye
Tangela Innis	Aye

- **Award Legal Services Contract**

Mr. Wilson reported on the Legal Services Contract. He stated we received only one response to our RFP and that was from McGuireWoods. Mr. Wilson stated we received additional inquiries, but these firms did not submit. McGuireWoods has worked for the Authority for the last forty years. He stated we are requesting the Board award the Legal Services contract to McGuireWoods for the contract term of two years with the opportunity to extend for an additional three years.

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

RESOLVED, that the Board awards the Legal Services contract to McGuireWoods and authorizes the Executive Director to execute the necessary contract documents:

For: 4 Against: 0 Abstain: 0

Vote:

Doug Smith	Aye
Kevin Massengill	Aye
Joseph Casey	Aye
Jeff Stoke	Aye

Absent During Vote:

Tangela Innis

- **Award Construction Contract for Liquid Lime Project**

Mr. Wilson reported on the construction contract for the liquid lime project. He stated we are requesting the Board award the Liquid Lime Project to MEB Contractors.

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

RESOLVED, that the Board awards the Liquid Lime System Project to MEB Contractors in the amount of \$2,354,000 and authorizes the Executive Director to execute the necessary contract documents. The Board also authorizes the use of the remaining funds in the 2017 In-plant bond issuance towards the project and authorizes the transfer of \$790,000 from the Operating Reserve to this project to fund the shortfall and provide a 5% contingency:

For: 5 Against: 0 Abstain: 0

Vote:

Doug Smith	Aye
Kevin Massengill	Aye
Joseph Casey	Aye
Jeff Stoke	Aye
Tangela Innis	Aye

Absent During Vote: None

- **Status Report**

Mr. Wilson reported on the status report.

- **Financials**

Ms. Wilkins reported on the Financials.

5. Items from Counsel

Mr. Anderson presented a Resolution to establish an updated policy for individual board members to use electronic communication means to participate in meetings.

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

RESOLVED, that the Board approves the Resolution to establish an updated policy for individual board members to use electronic communication means to participate in meetings:

For: 5 Against: 0 Abstain: 0

Vote:

Doug Smith	Aye
Kevin Massengill	Aye
Joseph Casey	Aye
Jeff Stoke	Aye
Tangela Innis	Aye

Absent During Vote: None

6. Closed Session

There was no Closed Session.

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

Mr. Massengill stated several months ago he spoke at Richard Bland College. He was questioned by a student about the treatment of water, so he put this question through to Mr. Wilson, who immediately responded back to the student and has scheduled a tour. He thanked Mr. Wilson for that.

Mr. Massengill referred to the accident on lake and is still waiting on an update. He stated that yesterday he had a meeting with one of his Board members and a group of concerned citizens. They discussed buoys, and it was decided that Dinwiddie County

would pay to have three buoys put in on both sides of the island and further down Whippernock Creek, and ARWA would provide the buoys. Mr. Massengill suggested that Chesterfield County may want to consider identifying areas that may need additional buoys for warnings also.

Dr. Casey stated they had a Chesterfield County academy graduation last night. There were fourteen countries represented amongst the class. Some had to walk miles just to fill up gallon containers of water and were amazed at the water resources we have that we take for granted.

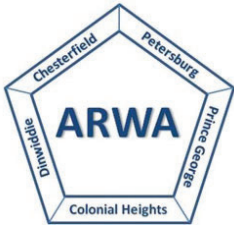
8. Adjourn

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

Upon a motion by Mr. Massengill and seconded by Dr. Casey the meeting was adjourned at 3:17 p.m.

MINUTES APPROVED BY:

Frank Haltom/Secretary/Treasurer



APPOMATTOX RIVER WATER AUTHORITY
21300 Chesdin Road
Petersburg, VA 23803



SOUTH CENTRAL WASTEWATER AUTHORITY
900 Magazine Road
Petersburg, VA 23803

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.

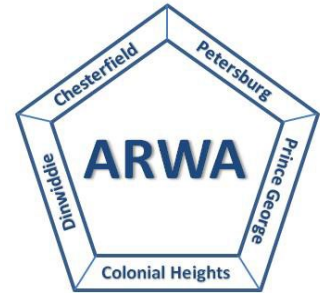
When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group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



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

Exhibit C

TO: Appomattox River Water Authority Board of Directors

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

DATE: March 16, 2023

SUBJECT: Proposed FY23/24 Budget

Below is a summary of the FY23/24 budget process to date:

- December 28, 2022 - proposed budget distributed to members and financial representatives via email.
- January 4, 2023 – Authority staff met with member utility directors and reviewed the budget.
- January 26, 2023 – presented the proposed FY23/24 budget to the Board and requested the Board set a public hearing date of March 16, 2023 at 2:00 p.m.
- February 17, 2023 – emailed members and financial representatives the advertised budget and a revised budget from the comments gathered at the January 26th meeting.
- February 22, 2023 – Advertised proposed FY23/24 budget on the ARWA website and in the Progress Index.
- March 1, 2023 – Second advertisement of the proposed FY23/24 budget in the Progress Index.

To date we have not received any additional comments on the proposed FY23/24 budget. From the budget discussion at the January 26th meeting and the updated CPI through February, staff recommends the Board move forward with the proposed FY23/24 budget that includes the 5% salary adjustment and elevated tank study. Mr. Massengill is unable to attend this meeting and requested that the Board hold the public hearing but not take action until the May 18th meeting.

To assist members with your review, the following documents are attached:

- Attachment #1 – information from the January 26th meeting.
- Attachment #2 – February 17, 2023 budget update.

- Attachment #3 – recommended FY23/24 budget for consideration

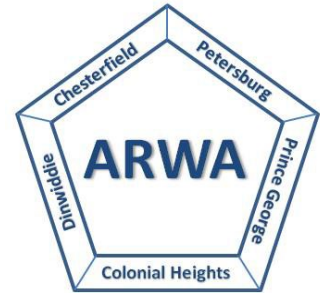
Board Action Requested:

Staff requests the Board hold the public hearing, approve the proposed FY23/24 budget with the 5% salary adjustment and elevated tank study for further consideration and provide any additional comments to staff. Staff requests that the Board not take formal action on the proposed FY23/24 budget until the May 18th meeting.

Attachment #1

January 26th Proposed FY23/24 Presentation

Appomattox River Water Authority



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

EXHIBIT C

TO: Appomattox River Water Authority Board of Directors

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

DATE: January 26, 2023

SUBJECT: Proposed FY23/24 Budget

On December 28, 2022, we distributed, via email, the proposed FY23/24 budget narrative to the primary members, utility directors and financial representatives. On January 4, 2023, we presented the proposed budget to the utility directors in a meeting held at ARWA in the conference room.

The original budget narrative (black text) and the revisions from the meeting (blue text) are included as Attachment 1.

We will present the highlights from the Budget Narrative at the meeting. There are two issues that need to be considered for the meeting:

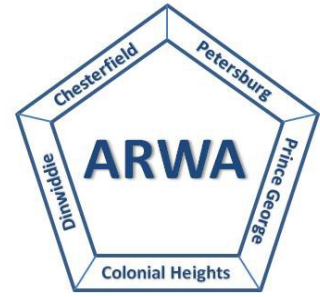
1. The proposed salary adjustment of 7.5%. We tied the requested salary adjustment to the CPI. In the Compensation and Classification Study, the recommendation was to tie the annual salary adjustments to the CPI. The supporting information from the Compensation and Classification Study and CPI is included in Attachment #1.
2. In the Budget Narrative we presented two budget scenarios, one without the elevated tank study and one with the tank study.

Staff's recommendation is to include the tank study in the budget. The proposed budget that includes the tank study is labeled Attachment 1a, pages 24 to 29 of the Board Package.

Board Action Requested:

Staff requests the Board provide direction on the requested salary adjustment, select a budget for advertisement and set a public hearing date for March 16, 2023, at 2:00 pm at the Appomattox River Water Authority.

Appomattox River Water Authority



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

TO: Appomattox River Water Authority Board Utility Directors

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

DATE: January 4, 2022

SUBJECT: Proposed FY23/24 Budget Narrative
Revision 001 – Comments from January 4th director's meeting

Meeting attendees:

George Hayes	Chesterfield County
Matt Rembold	Chesterfield County
Eddie Pearson	Dinwiddie County Water Authority
Tangela Innis	City of Petersburg
Randall Williams	City of Petersburg
Todd Flippen	City of Colonial Heights
Frank Haltom	Prince George County
Robert Wilson	ARWA/SCWWA
Jamie Gordon	ARWA/SCWWA
Melissa Wilkins	ARWA/SCWWA

The budget, Attachment #1, is divided into operating and maintenance costs, operating capital outlay, and debt service. Each participating jurisdiction is responsible for a pro rata share of the operating and maintenance costs and operating capital outlay costs. The pro rata share for O&M costs and operating capital outlay 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 operating capital outlay costs for FY23/24 are:

FY23/24

FY22/23

○ Chesterfield County	73.256%	72.790%
○ City of Colonial Heights	5.374%	5.493%
○ Dinwiddie County	3.821%	3.873%
○ City of Petersburg	15.089%	15.400%
○ Prince George County	2.460%	2.444%

The five-year data used for each member is included as Attachment #2. The five-year average is calculated from the annual total jurisdictional flow values.

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. The last payment for the 2012 Issuance will be made 10/01/2027.
- 2017 Issuance – Each participating jurisdiction’s pro rata share is calculated by the previous five-year running average for water purchased from the plant. The last payment for the 2017 Issuance will be made 10/01/2032.
- 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 last payment for the 2019 Issuance is 10/01/2031.

Both the 2012 Bond and the 2017 Bond financed solely capital maintenance projects to enhance the plant's reliability—not to expand the plant's capacity. In the authorizing resolutions for both the 2012 Bond and the 2017 Bond, the Board determined that the financed projects were for "improvement costs" within the meaning of the existing Water Service Agreements between the Authority and each of the participating jurisdictions (the "Existing Agreements"). Hence, under the Existing Agreements the debt service on both the 2012 Bond and the 2017 Bond is to be covered by

the Authority's annual budgeted "Base Rate." The Base Rate is a uniform rate applied equally to all water purchases by each participating jurisdiction, which rate is based annually upon the five year running average water usage for all participating jurisdictions for a given fiscal year such that funds generated from charging the Base Rate will be sufficient to pay for all of the costs associated with (a) the operation and maintenance of the Authority's water system, and (b) all improvement costs incurred by the Authority (including, for example, the debt service on the 2012 Bond and the 2017 Bond and any other bonds issued to finance improvement costs).

The 2019 issuance refinanced the 2010 issuance which refinanced 2002 (plant operations and maintenance). The 2002 issuance refinanced the 1982 issuance (plant operations and maintenance) and the 1983 issuance (expansion - \$20 million). The breakdown of 45.62% for expansion and 54.38% for operations and maintenance was established with the 2002 issuance. This was verified in the Appomattox River Water Authority Billing Special Report dated April 23, 2019, by Chesterfield County Internal Audit. At that time, the 2010 issuance breakdown was audited.

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.

Specific highlights for the proposed FY24 operating budget include (address line items with larger changes):

- 41000 – Salary. Our salaries increased for a variety of reasons. We were successful in hiring an IT employee with SCADA programming capabilities in May 2022. This has allowed us to perform additional upgrades and improvements in house. We have also been successful in filling all open positions – two operator trainees and a maintenance mechanic. FY23/24 is also the first full year with our new Compensation and Classification adjustments. We are requesting a 7.5% COLA adjustment per our approved Compensation and Classification plan. The Consumer Price Index illustrates inflation at 7.5% and is attached for reference as Attachment #3.

Mr. Hayes stated Chesterfield County has gone to a calendar year basis for salary adjustments and is implementing a 2% increase this January. Mr. Flippen asked why the Authority chose an index for development of the COLA. Mr. Wilson stated the Compensation and Classification Study referenced the use of an Consumer Price Index (CPI) for annual salary adjustments. A copy of the executive summary from the Compensation and Classification Study and an excerpt from the March 17, 2022 minutes are included as Attachment #5. The Compensation and Classification Study brought employee salaries to the current market value. The CPI is used to keep pace with inflation. Mr. Flippen asked that we provide a chart illustrating the average percent increase by department implemented as a result of the Compensation and Classification Study.

The chart below illustrates the average percent salary increase by department:

ARWA Department	Percent Increase
Operations	19.31%
Maintenance	10.07%
Laboratory	20.32%
Inventory	12.72%

The group indicated they thought the 7.5% COLA request was optimistic.

Mr. Flippen also asked how we chose the other utilities and authorities we benchmarked against to develop the salary ranges. The chosen groups included utilities and authorities of similar size and responsibilities. There were not a whole lot of wholesale only facilities of similar size to compare to. Mr. Flippen asked if the utilities, say in northern Virginia, were adjusted for regional impacts. Attachment #6 is an email from the vendor, The Archer Company, that states they checked the median versus the average survey values and there was little difference. For a median calculation, all the high and low values were discarded and only the middle value (or the average of the two middle values for even sets) was used for each benchmark.

- 42000 – Employee Benefits. This increase is a result of increased employee taxes, increased health care costs and increased life insurance. Our annual VRS contribution did go down.

Mr. Flippen asked why there was such a drastic change on line 42952 – Net Pension Adjustment. Ms. Wilkins advised that there have been employees that have retired, then passed away and not been able to take advantage of their pension. She went on to advise the pension fund is fully funded and this calculation is performed annually by a third-party vendor for VRS. Additionally, this calculation is derived by GASB Statement No.75 and its requirement with post-employment benefits.

- 43000 – Contractual Services
 - 43140 – Consulting Engineers – we reduced this line item with the amount of work anticipated.
 - 43150 – Legal Services – we increased the line item to account for new rates and if we begin discussions for additional raw water capacity.
 - 43156 – Admin and Maintenance Svc – SCWWA – we split services with an IT staff member. This reduction is a result of assigning this staff member to SCWWA permanently for the Nutrient Reduction Project.
 - 43180 – Potable Water Contract. This increase is for the carbon rental for the carbon caps on the thirty-two filters. This number was provided by the vendor.

- 43190 – Samples and Tests. This increase is for additional well sampling around the waste lagoons to support the assessment and correction actions for waste lagoons the VPDES permit. The estimate was provided by Peter Nash of WSP Earth & Environment formally Golder & Associates.
- 43500 – Printing and binding. This item was reduced based on history.
- 45000 – Other Charges
 - 45110 – Electricity – Pumping. This is the power for the raw water pump stations. The increase is based on history and increase in the unit cost for power.
 - 45111 – Electricity – Purification. This is the power for the plant. Since we flow gravity for a large part of the fall and winter months, it only increased slightly (not as much for pumping costs).
 - 45110 – Heating Fuel. This cost went up because the price of liquid propane increased.
 - 45220 – Freight. Decreased cost based on recent history.
 - 45308 – General Liability Insurance. Increased as a result of accidents and worker's compensation for last year.
- 46000 – Materials and Supplies
 - 46004 – Laboratory Supplies. This increase is for consumables in the laboratory.
 - 46005 – Purification Chemicals. This increase is based on the increases that our various chemicals suppliers have advised for calendar year 2023. This is the third consecutive year with significant chemical cost increases. Chemical bids will be opened January 12th. At that time, we will input “as bid” numbers into the budget.
 - 46008 – Vehicle and Equipment Fuels. Increased fuel costs for both vehicles and generators.
 - 46010 – Equipment Parts and Small Equipment Purchases. With the recent plant upgrades a lot of equipment was replaced and we were able to reduce this line item.

The Operating Capital Outlay (58000 series) included the following changes for FY23/24:

- Since we now have the Operating Reserve and ERRF, we removed the ongoing line item titled “Emergency Miscellaneous Repairs” under Section 58010. In the event of an emergency, we would draw first from the Operating Reserve and then, if it is exhausted, the ERRF. If we draw out of either account, it will be replenished the following fiscal year. If that replenishment is a large amount as determined by the Board and creates a burden to members, then it would be paid back over time as established by the Board.
- Like the “Emergency Miscellaneous Repairs,” we removed the ongoing line item titled “Valve Replacement” under Section 58090. “Valve Replacement” emergencies (non-budgeted) would be treated the same as described for “Emergency Miscellaneous Repairs.”
- 58010 – Machinery and Motors – Process
 - \$32,500 is to purchase actuators (materials) to install on slide gates so that maintenance staff can access the flocculators for maintenance. Maintenance staff will install the actuators.
 - \$125,000 is to purchase a variable frequency drive (VFD) for backwash pump #19 in RWPS2. The current pump is constant speed and creates an issue on backwashing filters.

The motor will accommodate a VFD, and we will use maintenance staff and the Authority's contract electrician for installation.

- 58020 – Instrumentation
 - \$28,000 – to purchase the materials to replace the PLC's (programmable logic controller) for four (4) Cla-Vac's. Installation and programming by maintenance staff.
 - \$30,000 – Remote Terminal Unit (RTU) replacement for three PLC cabinets. Authority staff will perform all work.
 - \$10,000 – RTU Master Human Machine Interface (HMI) – will be installed by maintenance staff.
- 58040 – Computer Equipment
 - \$5,000 – scheduled local area network (LAN) replacement – black box.
- 58050 – Furniture and Fixtures
 - \$20,000 – complete painting filter gallery floor from Filter #19 to Filter #32. Staff tried before to install this three-part epoxy system and determined it is beyond our expertise. This is for a third-party painter to complete.
 - \$10,000 – renovate women's bathroom. This project updates the 1983 women's bathroom. In-house staff performing the work.
- 58090 – Construction
 - \$45,000 – replacing the HVAC systems (air conditioning) for Raw Water Pump Station 1 (RWPS1) and Raw Water Pump Station 2 (RWPS2). These HVAC units cool the MCC's rooms. The maintenance logs illustrate a significant amount spent on maintenance and repair for these units. They have exceeded their useful life.
 - \$70,000 – Buss Differential Relay Replacement. These are improvements on the main electrical switch gear. This was identified when the electrical contractor installed the generator bi-directional feed improvements. An electrical contractor will make these improvements.

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

1. Rebuild Filters 2-8 – This project rebuilds the plant filters including replacing the underdrains for filters 2-8. In FY23 we completed the emergency rebuild on Filter #1. There are indications that the beds have been disturbed over the years due to age and media (carbon) change outs. The estimated cost is \$5.5 million. The estimated annual debt service for this project would be \$404,633.
2. Lagoon Liners – This will be a regulatory driven project. We currently have a VPDES permit for the lagoon discharge to the Appomattox River below the dam. Our consultant, WSP Earth and Environmental, is developing a downstream groundwater monitoring plan that has been submitted to DEQ. We are hopeful that DEQ may allow additional monitoring and not require the relining or replacement of the lagoons. The sampling line item in the operating budget has been increased for this additional sampling. However, at this time, we do not have the data or decision by DEQ. The estimated cost for this project is \$8.0 million.

The remaining four projects showing appropriations, without detail in the CIP, are to build a fourth clear well or two elevated tanks 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.

Mr. Hayes discussed the merits of designing the two elevated tanks now and considering the construction of the elevated tanks in FY25 with the rebuild of the filters and lagoon project. Mr. Wilson stated the elevated tank concept is already under consideration and will be presented in the Annual Maintenance Inspection (AMI) that should be available in mid-February. Mr. Wilson will add \$200,000 to the operating capital outlay to study the elevated tank concept so the group can see the impact on the proposed budget.

For FY23 we suggested starting a Rate Stabilization Fund that would be funded annually to offset long term operating capital outlay future costs. The consensus of the utility directors was to borrow the funds at the time the projects are necessary and not appropriate funds on an annual basis for a Rate Stabilization Fund. Two of the members currently have a Rate Stabilization Fund for their utility.

The transmission system was originally constructed in 1969 which makes it fifty-four 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 iron pipe walls. The existing transmission system should have a remaining useful life of another thirty to forty years. Paralleling of the transmission system will most likely be a result of increased demands and the need for additional capacity. As has been discussed in the past, the plant capacity is greater than the transmission capacity. Chesterfield County has shared preliminary plans where they may reduce the amount of water taken at the Swift Creek Meter. If that is the case, then the velocity goes down in the eastern leg and the useful life is extended. Mr. Hayes asked for clarification on the previous sentence. Mr. Wilson stated if Chesterfield reduces the amount of water they will be taking at the Swift Creek meter, there will be additional capacity available for future use and the wear and tear (reduced velocity on inside of pipe) on the transmission line will be reduced thereby increasing its useful life.

At the bottom of the budget, we have added a “Total Replacement and Construction Budget” section. This section totals the amount of operating capital outlay projects (capital) and debt service. The reason we added this section was to show this total for both operating capital outlay 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 operating capital outlay 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. The two main influences for the FY25/26 budget increase are new projects that include rebuilding original filters and lining the waste lagoons.

Statistics for the proposed FY24 budget:

- There will be an increase of \$1,228,814 from FY23 to FY24 or 14.4% for operating expenses.
- The estimated increase cost for chemicals is \$825,589 or 67.2% of the FY24 increase.
- The estimated increased cost for chemicals and power is \$920,589 or 74.9% of the FY24 increase.
- The overall increase to the proposed FY24 budget is \$938,389 or 8.3%.

The cost per 1,000 gallons for past five years for each member is as follows:

			Colonial		Prince
	Chesterfield	Petersburg	Heights	Dinwiddie	George
FY20	\$ 0.9797	\$ 0.9760	\$1.0083	\$ 1.4522	\$1.3698
FY21	\$ 0.9980	\$ 0.9946	\$1.0254	\$ 1.4457	\$1.3537
FY22	\$ 0.9857	\$ 0.9833	\$1.0140	\$ 1.4240	\$1.3345
FY23 (current)	\$ 0.9905	\$ 0.9874	\$1.0179	\$ 1.4198	\$1.3300
FY24 (proposed)	\$ 1.0489	\$ 1.0459	\$1.0762	\$ 1.4724	\$1.3771

The change is cost per 1,000 gallons for each member for the past five years is as follows:

			Colonial		Prince
	Chesterfield	Petersburg	Heights	Dinwiddie	George
FY20	1.90%	1.76%	6.10%	-4.27%	-2.19%
FY21	1.87%	1.91%	1.70%	-0.45%	-1.18%
FY22	-1.23%	-1.14%	-1.11%	-1.50%	-1.42%
FY23 (current)	0.49%	0.42%	0.38%	-0.29%	-0.34%
FY24 (proposed)	5.90%	5.92%	5.73%	3.70%	3.54%

The capacity of the plant is governed by DEQ through the VWP permit and VDH through our operating Permit:

- VWP Permit #01-1719 (raw water)
 - A maximum daily withdrawal of 86.24 mgd.
 - A maximum monthly withdrawal of 2.289 BG.
 - A maximum annual withdrawal of 17.934 BG.
- VDH PWSID: 4041035 (finished water)
 - Six month rolling average for production cannot exceed 56 mgd.

The maximum daily withdrawal to date is 59.8 mgd; maximum monthly withdrawal to date is 1.425 BG; and the maximum annual withdrawal to date is 12.840 BG. The maximum six-month rolling average for production to date is 38.08 mgd.

This year we requested each member provide a forecast for demands through FY33/34. That information is included as Attachment #4. We will need discuss a peaking factor to determine the implications to the criteria above.

Members stated they would look at their summer peaks and advise the peaking factor for their particular system. Members will also look at their projections to see if they are industrial or residential and where peak factors are pertinent.

Members indicated that copies of the Budget Narrative were distributed to the appropriate financial representatives and there are not comments to date to address at this time from the financial representatives.

Additional updates from the meeting:

- Attachment 1 – added the percent change column from the present year to the proposed year budget as requested by Mr. Flippen.
- Attachment 1a is the proposed FY24 budget with the addition of the elevated tank study that includes the transmission system modeling and evaluation:
 - Includes new percent change column
 - Added \$200,000 to operating capital outlay for elevated tank study.
 - Updated Construction Fund beginning in FY25/26 to include the debt service for the two new elevated tanks. The estimated construction cost is \$12,000,000.
 - Updated ARWA Projected Annual Cost and proposed rates to reflect the future debt service for the elevated tanks construction.
- The cost per 1,000 gallons for past five years for each member is as follows with the inclusion of the Elevated Tank Study:

			Colonial		Prince
	Chesterfield	Petersburg	Heights	Dinwiddie	George
FY20	\$ 0.9797	\$ 0.9760	\$1.0083	\$ 1.4522	\$1.3698
FY21	\$ 0.9980	\$ 0.9946	\$1.0254	\$ 1.4457	\$1.3537
FY22	\$ 0.9857	\$ 0.9833	\$1.0140	\$ 1.4240	\$1.3345
FY23 (current)	\$ 0.9905	\$ 0.9874	\$1.0179	\$ 1.4198	\$1.3300
FY24 (proposed)	\$ 1.0489	\$ 1.0459	\$1.0762	\$ 1.4724	\$1.3771
FY24 (w/ tank design)	\$ 1.0666	\$ 1.0636	\$1.0939	\$ 1.4900	\$1.3947

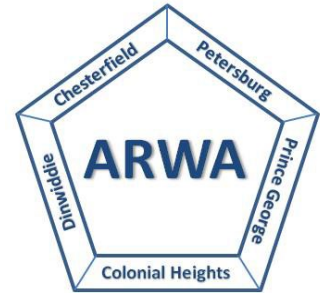
- The change is cost per 1,000 gallons for each member for the past five years is as follows:

			Colonial		Prince
	Chesterfield	Petersburg	Heights	Dinwiddie	George
FY20	1.90%	1.76%	6.10%	-4.27%	-2.19%
FY21	1.87%	1.91%	1.70%	-0.45%	-1.18%
FY22	-1.23%	-1.14%	-1.11%	-1.50%	-1.42%
FY23 (current)	0.49%	0.42%	0.38%	-0.29%	-0.34%
FY24 (proposed)	5.90%	5.92%	5.73%	3.70%	3.54%
FY24 (w/ tank design)	7.68%	7.72%	7.47%	4.94%	4.86%

Attachment #2

February 17th Budget Update

Appomattox River Water Authority



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

TO: Appomattox River Water Authority Board Members
Member Financial Representatives

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

DATE: February 17, 2023

SUBJECT: ARWA budget Update

To assist with the upcoming public hearing for the FY23/24 budget scheduled for March 16th, we are providing the following information to ensure we have addressed member's comments:

- Attachment #1 – A copy of the advertised budget. This budget includes the requested 7.5% salary adjustment and the elevated tank study.
- Attachment #2 – A copy of the advertisement for the wholesale rates. The advertisement is for the budget presented at the January 26th meeting (7.5% salary adjustment and elevated tank study) – worst case.
- Attachment #3 – Revised FY23/24 budget with a 5% salary adjustment and the elevated tank study.

At the January 26th meeting, we noted the following comments from members on the proposed FY23/24 budget:

- Prince George stated they could support a 5.0% salary adjustment.
- Colonial Heights is looking at a possible 5.0% salary adjustment for their employees.
- Dinwiddie and Chesterfield requested additional support for the methodology for a 7.5% salary adjustment.
- All members supported including the elevated tank study in the proposed budget.
- Members requested we make sure to delineate in the advertisement that the proposed rates are for “wholesale” rates.
- Mr. Massengill stated he will not be able to attend the March 16th meeting and requested the Board still hold the public hearing but not act until the May 18th meeting.

The 7.5% salary adjustment was derived from the CPI index for the South region. In the Compensation and Classification Study, the consultant recommended to increase salaries and salary ranges annually with COLAs based on the Consumer Price Index from the Bureau of Labor Statistics. At the time the budgets were prepared in November 2022 for discussion with the utility directors, the previous 12-month timeframe for inflation, November 2021 through October 2022 was 7.7%. In the proposed budget we recommended a 7.5% salary adjustment.

Both Dr. Casey and Mr. Smith asked if we were recommending adjusting the salary ranges at this time also. I stated we were not requesting adjustments to the salary ranges.

For the revised FY23/24 budget that includes a 5.0% COLA salary adjustment and the elevated tank study, we provide the following comparisons:

- Cost/1,000 gallons for each member.

			Colonial		Prince
	Chesterfield	Petersburg	Heights	Dinwiddie	George
FY20	\$ 0.9797	\$ 0.9760	\$1.0083	\$ 1.4522	\$1.3698
FY21	\$ 0.9980	\$ 0.9946	\$1.0254	\$ 1.4457	\$1.3537
FY22	\$ 0.9857	\$ 0.9833	\$1.0140	\$ 1.4240	\$1.3345
FY23 (current)	\$ 0.9905	\$ 0.9874	\$1.0179	\$ 1.4198	\$1.3300
FY24 (5% COLA+ tank study)	\$ 1.0616	\$ 1.0586	\$1.0889	\$ 1.4851	\$1.3898

- Percent change in rates for the last five years.

			Colonial		Prince
	Chesterfield	Petersburg	Heights	Dinwiddie	George
FY20	1.90%	1.76%	6.10%	-4.27%	-2.19%
FY21	1.87%	1.91%	1.70%	-0.45%	-1.18%
FY22	-1.23%	-1.14%	-1.11%	-1.50%	-1.42%
FY23 (current)	0.49%	0.42%	0.38%	-0.29%	-0.34%
FY24 (5% COLA + tank study)	7.18%	7.21%	6.98%	4.60%	4.50%

If anyone has any questions or needs any additional information, please let us know.

Attachment #1

FY23/24 Advertised Budget
Proposed 7.5% salary
adjustment and elevated tank
study

APPOMATTOX RIVER WATER AUTHORITY

Proposed: January 26, 2023

Approved:

Revised:

Revision Approved:

PROPOSED OPERATION & MAINTENANCE BUDGET 2023/2024

	<u>FY2022/2023</u>	<u>FY2023/2024</u>	<u>FY22/23 to FY23/24</u>	
	Budget	Budget	\$ Change	% Change
O&M EXPENSES				
41000 · Salary	\$1,931,678	\$2,192,918	\$261,240	13.52%
42000 · Employee Benefits	\$801,994	\$869,778	\$67,784	8.45%
42100 · Employer FICA	\$147,773	\$167,758	\$19,985	13.52%
42200 · Virginia Retirement System	\$68,961	\$51,095	-\$17,866	-25.91%
42210 · Deferred Comp 457	\$0	\$0	\$0	0.00%
42300 · Hospitalization Insurance	\$544,275	\$606,440	\$62,165	11.42%
42400 · VRS Group Life Insurance	\$25,884	\$29,385	\$3,501	13.52%
42500 · Group Term Life	\$2,100	\$2,100	\$0	0.00%
42600 · Unemployment Insurance	\$1,000	\$1,000	\$0	0.00%
42800 · Employee Promotions	\$10,000	\$10,000	\$0	0.00%
42900 · Other Fringe Benefits - EAP	\$2,000	\$2,000	\$0	0.00%
42950 · OPEB Health Insurance Adj	\$0	\$0	\$0	
42952 · Net Pension Adjustment				
43000 · Contractual Services	\$1,152,600	\$1,218,289	\$65,689	5.70%
43121 · Auditing Services	\$13,000	\$13,000	\$0	0.00%
43122 · Accounting Services	\$16,000	\$16,000	\$0	0.00%
43124 · Part-Time Summer Interns	\$5,000	\$5,000	\$0	0.00%
43130 · Legal/Engineering and Reservoir Studies	\$50,000	\$50,000	\$0	0.00%
43140 · Consulting Engineers	\$85,000	\$75,000	-\$10,000	-11.76%
43150 · Legal Services	\$75,000	\$85,000	\$10,000	13.33%
43152 · Medical - Testing	\$5,000	\$5,000	\$0	0.00%
43155 · Other Consulting Services	\$0	\$0	\$0	0.00%
43156 · Admin and Maintenance Svc-SCWWA	\$8,000	\$0	-\$8,000	-100.00%
43160 · Trustee Services	\$12,000	\$12,000	\$0	0.00%

43162 - Bank Service Charges	\$2,000	\$2,100	\$100	5.00%
43170 - Research	\$17,500	\$17,500	\$0	0.00%
43180 - Potable Water Contract	\$520,000	\$585,589	\$65,589	12.61%
43190 - Samples and Tests	\$40,000	\$50,000	\$10,000	25.00%
43200 - Lake Patrol	\$4,000	\$4,000	\$0	0.00%
43201 - Reservoir Management - Invasive Control Program	\$25,000	\$25,000	\$0	0.00%
43210 - Software Support	\$50,000	\$50,000	\$0	0.00%
43220 - VPDES Permit Fee	\$15,000	\$15,000	\$0	0.00%
43310 - Repair Services	\$25,000	\$25,000	\$0	0.00%
43320 - Service Contracts	\$125,000	\$125,000	\$0	0.00%
43500 - Printing and Binding	\$3,000	\$1,000	-\$2,000	-66.67%
43600 - Grounds Maintenance	\$57,100	\$57,100	\$0	0.00%
45000 - Other Charges	\$1,098,000	\$1,197,100	\$99,100	9.03%
45110 - Electricity - Pumping	\$510,000	\$600,000	\$90,000	17.65%
45111 - Electricity - Purification	\$275,000	\$280,000	\$5,000	1.82%
45120 - Heating Fuel	\$60,000	\$65,000	\$5,000	8.33%
45130 - Trash Pickup	\$5,500	\$8,100	\$2,600	47.27%
45210 - Postal Services	\$2,500	\$1,500	-\$1,000	-40.00%
45220 - Freight	\$20,000	\$10,000	-\$10,000	-50.00%
45230 - Telecommunications	\$35,000	\$35,000	\$0	0.00%
45308 - General Liability Insurance	\$110,000	\$125,000	\$15,000	13.64%
45410 - Lease/Rent of Equipment	\$25,000	\$20,000	-\$5,000	-20.00%
45510 - Mileage Allowance			\$0	0.00%
45530 - Meals and Lodging	\$5,000	\$2,500	-\$2,500	-50.00%
45540 - Education and Training	\$25,000	\$25,000	\$0	0.00%
45550 - Safety Supplies	\$25,000	\$25,000	\$0	0.00%
46000 - Materials and Supplies	\$3,520,000	\$4,255,000	\$735,000	20.88%
46001 - Office Supplies	\$12,000	\$10,000	-\$2,000	-16.67%
46004 - Laboratory Supplies	\$83,000	\$85,000	\$2,000	2.41%
46005 - Purification Chemicals	\$2,990,000	\$3,750,000	\$760,000	25.42%
46006 - Purification Process and Janitorial Supplies	\$15,000	\$10,000	-\$5,000	-33.33%
46007 - Repair & Maint Supplies-Shop	\$210,000	\$210,000	\$0	0.00%
46008 - Vehicle and Equipment Fuels	\$25,000	\$40,000	\$15,000	60.00%
46009 - Vehicle and Equipment Supplies	\$20,000	\$15,000	-\$5,000	-25.00%
46010 - Equipment Parts and Small Equipment Purchases	\$55,000	\$25,000	-\$30,000	-54.55%
46011 - Uniforms	\$15,000	\$15,000	\$0	0.00%
46012 - Dues and Subscriptions	\$40,000	\$35,000	-\$5,000	-12.50%
46014 - Repair & Maint Supplies-IT	\$30,000	\$35,000	\$5,000	16.67%

46015 · Small Equipment Purchases	\$0	\$0	\$0	0.00%
46016 · Operations Supplies and Maintenance	\$25,000	\$25,000	\$0	0.00%
Total Operating Expenses	\$8,504,272	\$9,733,086	\$1,228,814	14.45%
58000 · Operating Capital Outlay	\$674,000	\$585,500	-\$88,500	-13.13%
Debt - 2010 Issue (Refunded as 2019 series)	\$0	\$0	\$0	0.00%
Debt - 2012 Issue	\$302,322	\$302,293	-\$29	-0.01%
Debt - 2017 Issue	\$1,080,795	\$1,080,648	-\$147	-0.01%
Debt - 2019 Issue (2010 Refunded)	\$704,760	\$703,011	-\$1,749	-0.25%
Total Debt	\$2,087,876	\$2,085,952	-\$1,925	-0.09%
Reserve Policy	\$0	\$0	\$0	0.00%
Total Expenses	\$11,266,148	\$12,404,537	\$1,138,389	10.10%

FY Budget Year		Revenues					
2023/2024		Appomattox River Water Authority					
Proposed		Jan. 26, 2023		Adopted		Revised	
		Revision Adopted					
		Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	Total
1) Operations and Maintenance Base Rate							
O&M Rate							
	\$/1000 gallons	\$ 1.0636	\$ 1.0636	\$ 1.0636	\$ 1.0636	\$ 1.0636	\$ 1.0636
Estimated (\$/quarter)	\$	2,207,529	\$ 161,956.95	\$ 115,134	\$ 454,708	\$ 74,127	\$ 3,013,455.87
Total annual allocation	\$	8,830,117	\$ 647,828	\$ 460,536	\$ 1,818,833	\$ 296,510	\$ 12,053,823
% of flows		73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
Estimated (mgd)		22.746	1.669	1.186	4.685	0.764	31.051
Calc. annual usage (bg)		8.302	0.609	0.433	1.710	0.279	11.334
O&M =	\$ 9,733,086	Op. Cap. Outlay	\$ 585,500	54.38% 2019 Debt (maintenance)	\$ 382,297		
Int./Misc. Income	\$ 30,000	100% 2012 Debt	\$ 302,293	100% 2017 Debt	\$ 1,080,648	Reserve Policy	\$0
BASE RATE	\$/1000gals	\$ 1.0636	\$ 1.0636	\$ 1.0636	\$ 1.0636	\$ 1.0636	
2) Expansion Rate							
Bonds	% Financed						
Rate (cents/1000 gals)		\$ 0.0030	\$ 0.0303	\$ 0.4265	\$ -	\$ 0.3312	
2019 expansion (\$/year)	45.62%	\$ 25,240	\$ 18,473	\$ 184,667	\$ -	\$ 92,333	\$ 320,714
% allocation	7.87%		5.76%	57.58%	0.00%	28.79%	100.00%
FY22/23 Bond Payments	2019 refunding =	\$ 703,011					
TOTAL DEBT SERVICE RATE	\$/1000 gals	\$ 0.0030	\$ 0.0303	\$ 0.4265	\$ -	\$ 0.3312	
	\$/year	\$ 25,240	\$ 18,473	\$ 184,667	\$ -	\$ 92,333	\$ 320,714
3) Total Rate							
TOTAL RATE (BASE + EXPANSION)	\$/1000gals	\$ 1.0666	1.0939	1.4900	1.0636	1.3947	\$ 1.2218
Estimated annual charges	\$/year	\$ 8,855,357	\$ 666,301	\$ 645,203	\$ 1,818,833	\$ 388,843	\$ 12,374,537
4) Budget Comparison (see note 1)							
FY23/24 Total Rate	\$/1000 gals	\$ 1.0666	\$ 1.0939	\$ 1.4900	\$ 1.0636	\$ 1.3947	\$ 1.2218
FY22/23 Total Rate	\$/1000 gals	\$ 0.9905	\$ 1.0179	\$ 1.4198	\$ 0.9874	\$ 1.3300	\$ 1.1491
Total Rate Difference	\$/1000 gals	\$ 0.0761	\$ 0.0760	\$ 0.0703	\$ 0.0762	\$ 0.0647	\$ 0.0727
Total Rate Difference	%	7.68%	7.47%	4.95%	7.71%	4.87%	6.32%
FY23/24 Revenues	\$/year	\$ 8,855,357	\$ 666,301	\$ 645,203	\$ 1,818,833	\$ 388,843	\$ 12,374,537
FY22/23 Revenues	\$/year	\$ 7,970,116	\$ 618,033	\$ 607,881	\$ 1,680,806	\$ 359,312	\$ 11,236,148
Annual Cash Difference	\$/year	\$ 885,241	\$ 48,268	\$ 37,322	\$ 138,027	\$ 29,531	\$ 1,138,389
FY23/24 Expenses	\$ 12,404,537	FY 23/24 Income Revenue	\$ 12,404,537				

NOTES:

Reserve Policy: Appomattox River Water Authority FY23/24
Reserve Policy Calculation

ARWA O&M Budget	Reserves as of 6/30/2021	Revenue for FY2021/2022	Total expected reserves on 6/30/2022	Recommended 50% O&M Reserves	Annual Charge to achieve 50% Reserves
\$9,733,086	\$6,403,336	\$0	\$6,403,336	\$4,866,543	\$0

APPOMATTOX RIVER WATER AUTHORITY
Operating Capital Outlay - 58000
FY23/24

Acct#	Current Budget 22/23	Proposed Budget 23/24	INFORMATIONAL & PLANNING									
			24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
58010 - Machinery and Motors-Process	\$ 124,000	\$ 157,500	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	
58020 - Instrumentation	\$ 100,000	\$ 68,000	\$ 58,000	\$ 30,000	\$ 115,000	\$ 35,000	\$ 35,000	\$ 25,000	\$ -	\$ -	\$ -	
58030 - SCADA	\$ -	\$ -	\$ -	\$ 15,750	\$ -	\$ -	\$ 10,000	\$ -	\$ 20,500	\$ -	\$ -	
58040 - Computer Equipmment	\$ -	\$ 15,000	\$ 20,250	\$ 5,500	\$ 25,800	\$ 11,000	\$ 6,400	\$ 51,720	\$ 7,000	\$ 7,300	\$ 13,900	
58050 - Furniture and Fixtures	\$ -	\$ 30,000	\$ -	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
58060 - Motor Vehicles	\$ -	\$ -	\$ 12,000	\$ 46,667	\$ 80,000	\$ 40,000	\$ 35,000	\$ -	\$ 110,000	\$ -	\$ -	
58065 - Maintenance Equipment	\$ -	\$ -	\$ -	\$ 115,000	\$ 35,000	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	
58090 - Construction	\$ 450,000	\$ 315,000	\$ 400,000	\$ 350,000	\$ 300,000	\$ 250,000	\$ -	\$ -	\$ 75,000	\$ -	\$ -	
TOTALS:	\$ 674,000	\$ 585,500	\$ 590,250	\$ 792,917	\$ 655,800	\$ 436,000	\$ 101,400	\$ 76,720	\$ 212,500	\$ 7,300	\$ 13,900	

NOTE: FY 21/22 OPERATING CAPITAL OUTLAY BUDGET TO BE APPROVED WITH BUDGET

Construction Fund (Capital Projects)
FY23/24

Project Cost Estimate	Budget 22/23	Proposed Budget 23/24	INFORMATIONAL & PLANNING									
			24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
ITEM												
2012 Bond	\$ 302,322	\$ 302,293	\$ 302,016	\$ 302,475	\$ 301,671	\$ 301,604	\$ -	\$ -	\$ -	.	.	
2017 Bond	\$ 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	\$ 1,079,929	\$ 1,080,423	
2019 Bond (2010 Rebonding)	\$ 704,760	\$ 703,011	\$ 705,495	\$ 706,888	\$ 712,224	\$ 701,702	\$ 705,204	\$ 702,762	\$ 699,439	\$ 700,021	\$ -	
Rebuild Filters 1-8 \$ 5,500,000				\$ 404,633	\$ 404,633	\$ 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	\$ 588,558	\$ 588,558	
Elevated Tank Storage \$ 12,000,000				\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	
Clearwell #4												
Transmission Main - Chesdin Rd. to Pickett Rd												
Transmission Main - Pickett Ave. to Matoaca Tank												
Transmission Main - Matoaca Tank to Branders Bridge												
Transmission Main - Branders Bridge to Lakeview												
Totals	\$ 2,087,876	\$ 2,085,952	\$ 2,087,483	\$ 4,135,404	\$ 4,140,129	\$ 4,129,153	\$ 3,831,075	\$ 3,828,051	\$ 3,825,518	\$ 3,825,248	\$ 3,125,721	

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

Total Operating Capital Outlay and Construction Budget											
22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
\$ 2,761,876	\$ 2,671,452	\$ 2,677,733	\$ 4,928,321	\$ 4,795,929	\$ 4,565,153	\$ 3,932,475	\$ 3,904,771	\$ 4,038,018	\$ 3,832,548	\$ 3,139,621	

ARWA Budget comparisons

Year	O&M Expenses	Operating Capital Outlay	Debt Service 2010 issue	Debt Service 2012 issue	Debt Service 2017 issue	See Note (1) Debt Service 2019 issue	See Note (2) Debt Service 2026 issue	Reserve Policy	Total	Difference	% change	Comments
22/23	\$ 8,504,272	\$ 674,000		\$ 302,322	\$ 1,080,795	\$ 704,760		\$ -	\$ 11,266,148			
23/24	\$ 9,733,086	\$ 585,500		\$ 302,293	\$ 1,080,648	\$ 703,011		\$ -	\$ 12,404,537	\$ 1,138,389	10%	Reserve Fund is 50% of O&M
24/25	\$ 10,025,078	\$ 590,250		\$ 302,016	\$ 1,079,973	\$ 705,495		\$ -	\$ 12,702,811	\$ 298,274	2%	
25/26	\$ 10,325,831	\$ 792,917		\$ 302,475	\$ 1,080,744	\$ 706,888	\$ 2,045,298	\$ -	\$ 15,254,152	\$ 2,551,340	20%	
26/27	\$ 10,635,605	\$ 655,800		\$ 301,671	\$ 1,080,936	\$ 712,224	\$ 2,045,298	\$ -	\$ 15,431,535	\$ 177,383	1%	
27/28	\$ 10,954,674	\$ 436,000		\$ 301,604	\$ 1,080,550	\$ 701,702	\$ 2,045,298	\$ -	\$ 15,519,827	\$ 88,292	1%	

Notes:

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

(2) The debt service service shown in 2026 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

ARWA Projected Annual Cost

5 year projections - O&M, Operating Capital Outlay, Reserve Policy, 54.38% 2019 Series, 2012 Series, 2017

Series, and estimated 2026 Series

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	total
	73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
FY 23/24	\$ 8,852,093	\$ 649,440	\$ 461,682	\$ 1,823,360	\$ 297,247	\$ 12,083,823
FY 24/25	\$ 9,069,766	\$ 665,410	\$ 473,035	\$ 1,868,197	\$ 304,557	\$ 12,380,964
FY 25/26	\$ 10,938,304	\$ 802,496	\$ 570,489	\$ 2,253,079	\$ 367,301	\$ 14,931,669
FY 26/27	\$ 11,066,464	\$ 811,899	\$ 577,173	\$ 2,279,478	\$ 371,605	\$ 15,106,618
FY 27/28	\$ 11,134,659	\$ 816,902	\$ 580,730	\$ 2,293,525	\$ 373,895	\$ 15,199,711

Note: Budget % based on five year average flow consumption (FY17/18 to FY21/22)

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

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	total
Capacity	7.870%	5.760%	57.580%	0.000%	28.790%	100.000%
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
FY 26/27	\$ 25,571	\$ 18,715	\$ 187,087	\$ -	\$ 93,543	\$ 324,917
FY 27/28	\$ 25,193	\$ 18,439	\$ 184,323	\$ -	\$ 92,161	\$ 320,116

5 year projections - \$/year

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	TOTAL
FY 23/24	\$ 8,877,334	\$ 667,913	\$ 646,349	\$ 1,823,360	\$ 389,581	\$ 12,404,537
FY 24/25	\$ 9,095,096	\$ 683,948	\$ 658,354	\$ 1,868,197	\$ 397,217	\$ 12,702,811
FY 25/26	\$ 10,963,683	\$ 821,071	\$ 756,174	\$ 2,253,079	\$ 460,144	\$ 15,254,152
FY 26/27	\$ 11,092,035	\$ 830,614	\$ 764,260	\$ 2,279,478	\$ 465,148	\$ 15,431,535
FY 27/28	\$ 11,159,852	\$ 835,341	\$ 765,053	\$ 2,293,525	\$ 466,056	\$ 15,519,827

5 year projections - \$/1000 gallons

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	Average
Annual consumptions (1000 gallons)				11,333,539		
Five year average flows (FY17/18 to FY21/22)	73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
FY 23/24	\$ 1.0692	\$ 1.0965	\$ 1.4927	\$ 1.0662	\$ 1.3974	\$ 1.2244
FY 24/25	\$ 1.0955	\$ 1.1229	\$ 1.5204	\$ 1.0924	\$ 1.4248	\$ 1.2512
FY 25/26	\$ 1.3205	\$ 1.3480	\$ 1.7463	\$ 1.3175	\$ 1.6505	\$ 1.4766
FY 26/27	\$ 1.3360	\$ 1.3636	\$ 1.7650	\$ 1.3329	\$ 1.6684	\$ 1.4932
FY 27/28	\$ 1.3442	\$ 1.3714	\$ 1.7668	\$ 1.3411	\$ 1.6717	\$ 1.4990

See Note (1) below

Notes:

(1) The FY25/26 figures include the proposed debt service for a 2026 Issuance. The projects for the issuance are still under consideration and the funding distribution has not been approved. These figures are subject to change.

Attachment #2

FY23/24 Budget Advertisement

The Appomattox River Water Authority and South Central Wastewater Authority provide wholesale water treatment, transmission, and wastewater treatment services to their member jurisdictions: Chesterfield County, City of Colonial Heights, Dinwiddie County, City of Petersburg, and Prince George County. These members pay wholesale water and wastewater rates and charges. Each member operates its own separate public retail water distribution and wastewater collection systems with different water and wastewater retail utility rates charged to their customers.

Pursuant to resolutions approved by each authority board on January 26, 2023, each authority will hold a public hearing on the proposed FY2024 rates on March 16, 2023, at 2:00 p.m. at the Appomattox River Water Authority located at 21300 Chesdin Road, Petersburg, VA 23803. Any person interested may appear at the meeting and present their views regarding the proposed rate(s). Comments and questions may also be submitted to mwilkins@arwava.org. All comments and questions will be conveyed to the authority boards during the public hearings on March 16, 2023.

<u>APPOMATTOX RIVER WATER AUTHORITY</u>		
<u>WHOLESALE RATES (\$/1,000 gallons)</u>		
		FY2024
Chesterfield County		\$ 1.0666
City of Colonial Heights		\$ 1.0939
Dinwiddie County		\$ 1.4900
City of Petersburg		\$ 1.0636
Prince George County		\$ 1.3947

<u>SOUTH CENTRAL WASTEWATER AUTHORITY</u>			
<u>CONTRACT PAYMENT DETAIL BY MEMBER JURISDICTION</u>			
		FY2024	
	City of Petersburg	\$ 5,694,065.55	
	City of Colonial Heights	\$ 1,733,011.41	
	Chesterfield County	\$ 834,519.18	
	Prince George County	\$ 550,799.41	
	Dinwiddie County	\$ 833,930.18	
	TOTAL	\$ 9,646,325.72	

Attachment #3

FY23/24 Budget with 5.0%
salary adjustment and elevated
tank study

APPOMATTOX RIVER WATER AUTHORITY

Proposed: January 26, 2023

Approved:

Revised:

Revision Approved:

PROPOSED OPERATION & MAINTENANCE BUDGET 2023/2024

	<u>FY2022/2023</u>	<u>FY2023/2024</u>	<u>FY22/23 to FY23/24</u>	
	Budget	Budget	\$ Change	% Change
O&M EXPENSES				
41000 · Salary	\$1,931,678	\$2,142,321	\$210,643	10.90%
42000 · Employee Benefits	\$801,994	\$864,051	\$62,057	7.74%
42100 · Employer FICA	\$147,773	\$163,888	\$16,114	10.90%
42200 · Virginia Retirement System	\$68,961	\$49,916	-\$19,045	-27.62%
42210 · Deferred Comp 457	\$0	\$0	\$0	0.00%
42300 · Hospitalization Insurance	\$544,275	\$606,440	\$62,165	11.42%
42400 · VRS Group Life Insurance	\$25,884	\$28,707	\$2,823	10.90%
42500 · Group Term Life	\$2,100	\$2,100	\$0	0.00%
42600 · Unemployment Insurance	\$1,000	\$1,000	\$0	0.00%
42800 · Employee Promotions	\$10,000	\$10,000	\$0	0.00%
42900 · Other Fringe Benefits - EAP	\$2,000	\$2,000	\$0	0.00%
42950 · OPEB Health Insurance Adj	\$0	\$0	\$0	
42952 · Net Pension Adjustment				
43000 · Contractual Services	\$1,152,600	\$1,218,289	\$65,689	5.70%
43121 · Auditing Services	\$13,000	\$13,000	\$0	0.00%
43122 · Accounting Services	\$16,000	\$16,000	\$0	0.00%
43124 · Part-Time Summer Interns	\$5,000	\$5,000	\$0	0.00%
43130 · Legal/Engineering and Reservoir Studies	\$50,000	\$50,000	\$0	0.00%
43140 · Consulting Engineers	\$85,000	\$75,000	-\$10,000	-11.76%
43150 · Legal Services	\$75,000	\$85,000	\$10,000	13.33%
43152 · Medical - Testing	\$5,000	\$5,000	\$0	0.00%
43155 · Other Consulting Services	\$0	\$0	\$0	0.00%
43156 · Admin and Maintenance Svc-SCWWA	\$8,000	\$0	-\$8,000	-100.00%
43160 · Trustee Services	\$12,000	\$12,000	\$0	0.00%

43162 - Bank Service Charges	\$2,000	\$2,100	\$100	5.00%
43170 - Research	\$17,500	\$17,500	\$0	0.00%
43180 - Potable Water Contract	\$520,000	\$585,589	\$65,589	12.61%
43190 - Samples and Tests	\$40,000	\$50,000	\$10,000	25.00%
43200 - Lake Patrol	\$4,000	\$4,000	\$0	0.00%
43201 - Reservoir Management - Invasive Control Program	\$25,000	\$25,000	\$0	0.00%
43210 - Software Support	\$50,000	\$50,000	\$0	0.00%
43220 - VPDES Permit Fee	\$15,000	\$15,000	\$0	0.00%
43310 - Repair Services	\$25,000	\$25,000	\$0	0.00%
43320 - Service Contracts	\$125,000	\$125,000	\$0	0.00%
43500 - Printing and Binding	\$3,000	\$1,000	-\$2,000	-66.67%
43600 - Grounds Maintenance	\$57,100	\$57,100	\$0	0.00%
45000 - Other Charges	\$1,098,000	\$1,197,100	\$99,100	9.03%
45110 - Electricity - Pumping	\$510,000	\$600,000	\$90,000	17.65%
45111 - Electricity - Purification	\$275,000	\$280,000	\$5,000	1.82%
45120 - Heating Fuel	\$60,000	\$65,000	\$5,000	8.33%
45130 - Trash Pickup	\$5,500	\$8,100	\$2,600	47.27%
45210 - Postal Services	\$2,500	\$1,500	-\$1,000	-40.00%
45220 - Freight	\$20,000	\$10,000	-\$10,000	-50.00%
45230 - Telecommunications	\$35,000	\$35,000	\$0	0.00%
45308 - General Liability Insurance	\$110,000	\$125,000	\$15,000	13.64%
45410 - Lease/Rent of Equipment	\$25,000	\$20,000	-\$5,000	-20.00%
45510 - Mileage Allowance			\$0	0.00%
45530 - Meals and Lodging	\$5,000	\$2,500	-\$2,500	-50.00%
45540 - Education and Training	\$25,000	\$25,000	\$0	0.00%
45550 - Safety Supplies	\$25,000	\$25,000	\$0	0.00%
46000 - Materials and Supplies	\$3,520,000	\$4,255,000	\$735,000	20.88%
46001 - Office Supplies	\$12,000	\$10,000	-\$2,000	-16.67%
46004 - Laboratory Supplies	\$83,000	\$85,000	\$2,000	2.41%
46005 - Purification Chemicals	\$2,990,000	\$3,750,000	\$760,000	25.42%
46006 - Purification Process and Janitorial Supplies	\$15,000	\$10,000	-\$5,000	-33.33%
46007 - Repair & Maint Supplies-Shop	\$210,000	\$210,000	\$0	0.00%
46008 - Vehicle and Equipment Fuels	\$25,000	\$40,000	\$15,000	60.00%
46009 - Vehicle and Equipment Supplies	\$20,000	\$15,000	-\$5,000	-25.00%
46010 - Equipment Parts and Small Equipment Purchases	\$55,000	\$25,000	-\$30,000	-54.55%
46011 - Uniforms	\$15,000	\$15,000	\$0	0.00%
46012 - Dues and Subscriptions	\$40,000	\$35,000	-\$5,000	-12.50%
46014 - Repair & Maint Supplies-IT	\$30,000	\$35,000	\$5,000	16.67%

46015 · Small Equipment Purchases	\$0	\$0	\$0	0.00%
46016 · Operations Supplies and Maintenance	\$25,000	\$25,000	\$0	0.00%
Total Operating Expenses	\$8,504,272	\$9,676,761	\$1,172,489	13.79%
58000 · Operating Capital Outlay	\$674,000	\$585,500	-\$88,500	-13.13%
Debt - 2010 Issue (Refunded as 2019 series)	\$0	\$0	\$0	0.00%
Debt - 2012 Issue	\$302,322	\$302,293	-\$29	-0.01%
Debt - 2017 Issue	\$1,080,795	\$1,080,648	-\$147	-0.01%
Debt - 2019 Issue (2010 Refunded)	\$704,760	\$703,011	-\$1,749	-0.25%
Total Debt	\$2,087,876	\$2,085,952	-\$1,925	-0.09%
Reserve Policy	\$0	\$0	\$0	0.00%
Total Expenses	\$11,266,148	\$12,348,213	\$1,082,065	9.60%

FY Budget Year		Revenues					
2023/2024		Appomattox River Water Authority					
Proposed		Jan. 26, 2023		Adopted		Revised	
		Revision Adopted					
		Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	Total
1) Operations and Maintenance Base Rate							
O&M Rate							
	\$/1000 gallons	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586
Estimated (\$/quarter)	\$	2,197,214	\$ 161,200.16	\$ 114,596	\$ 452,584	\$ 73,781	\$ 2,999,374.73
Total annual allocation	\$	8,788,856	\$ 644,801	\$ 458,384	\$ 1,810,334	\$ 295,124	\$ 11,997,499
% of flows		73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
Estimated (mgd)		22.746	1.669	1.186	4.685	0.764	31.051
Calc. annual usage (bg)		8.302	0.609	0.433	1.710	0.279	11.334
O&M =	\$ 9,676,761	Op. Cap. Outlay	\$ 585,500	54.38% 2019 Debt (maintenance)	\$ 382,297		
Int./Misc. Income	\$ 30,000	100% 2012 Debt	\$ 302,293	100% 2017 Debt	\$ 1,080,648	Reserve Policy	\$0
BASE RATE	\$/1000gals	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586	
2) Expansion Rate							
Bonds	% Financed						
Rate (cents/1000 gals)		\$ 0.0030	\$ 0.0303	\$ 0.4265	\$ -	\$ 0.3312	
2019 expansion (\$/year)	45.62%	\$ 25,240	\$ 18,473	\$ 184,667	\$ -	\$ 92,333	\$ 320,714
% allocation	7.87%		5.76%	57.58%	0.00%	28.79%	100.00%
FY22/23 Bond Payments	2019 refunding =	\$ 703,011					
TOTAL DEBT SERVICE RATE	\$/1000 gals	\$ 0.0030	\$ 0.0303	\$ 0.4265	\$ -	\$ 0.3312	
	\$/year	\$ 25,240	\$ 18,473	\$ 184,667	\$ -	\$ 92,333	\$ 320,714
3) Total Rate							
TOTAL RATE (BASE + EXPANSION)	\$/1000gals	\$ 1.0616	1.0889	1.4851	1.0586	1.3898	\$ 1.2168
Estimated annual charges	\$/year	\$ 8,814,096	\$ 663,274	\$ 643,051	\$ 1,810,334	\$ 387,457	\$ 12,318,213
4) Budget Comparison (see note 1)							
FY23/24 Total Rate	\$/1000 gals	\$ 1.0616	\$ 1.0889	\$ 1.4851	\$ 1.0586	\$ 1.3898	\$ 1.2168
FY22/23 Total Rate	\$/1000 gals	\$ 0.9905	\$ 1.0179	\$ 1.4198	\$ 0.9874	\$ 1.3300	\$ 1.1491
Total Rate Difference	\$/1000 gals	\$ 0.0711	\$ 0.0710	\$ 0.0653	\$ 0.0712	\$ 0.0598	\$ 0.0677
Total Rate Difference	%	7.18%	6.98%	4.60%	7.21%	4.49%	5.89%
FY23/24 Revenues	\$/year	\$ 8,814,096	\$ 663,274	\$ 643,051	\$ 1,810,334	\$ 387,457	\$ 12,318,213
FY22/23 Revenues	\$/year	\$ 7,970,116	\$ 618,033	\$ 607,881	\$ 1,680,806	\$ 359,312	\$ 11,236,148
Annual Cash Difference	\$/year	\$ 843,980	\$ 45,241	\$ 35,170	\$ 129,529	\$ 28,145	\$ 1,082,065
FY23/24 Expenses	\$ 12,348,213	FY 23/24 Income Revenue	\$ 12,348,213				

NOTES:

Reserve Policy:

Reserve Policy Calculation

Appomattox River Water Authority FY23/24

ARWA O&M Budget	Reserves as of 6/30/2021	Revenue for FY2021/2022	Total expected reserves on 6/30/2022	Recommended 50% O&M Reserves	Annual Charge to achieve 50% Reserves
\$9,676,761	\$6,403,336	\$0	\$6,403,336	\$4,838,381	\$0

APPOMATTOX RIVER WATER AUTHORITY
Operating Capital Outlay - 58000
FY23/24

Acct#	Current Budget 22/23	Proposed Budget 23/24	INFORMATIONAL & PLANNING									
			24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
58010 - Machinery and Motors-Process	\$ 124,000	\$ 157,500	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
58020 - Instrumentation	\$ 100,000	\$ 68,000	\$ 58,000	\$ 30,000	\$ 115,000	\$ 35,000	\$ 35,000	\$ 25,000	\$ -	\$ -	\$ -	\$ -
58030 - SCADA	\$ -	\$ -	\$ -	\$ 15,750	\$ -	\$ -	\$ 10,000	\$ -	\$ 20,500	\$ -	\$ -	\$ -
58040 - Computer Equipmment	\$ -	\$ 15,000	\$ 20,250	\$ 5,500	\$ 25,800	\$ 11,000	\$ 6,400	\$ 51,720	\$ 7,000	\$ 7,300	\$ 13,900	
58050 - Furniture and Fixtures	\$ -	\$ 30,000	\$ -	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
58060 - Motor Vehicles	\$ -	\$ -	\$ 12,000	\$ 46,667	\$ 80,000	\$ 40,000	\$ 35,000	\$ -	\$ 110,000	\$ -	\$ -	\$ -
58065 - Maintenance Equipment	\$ -	\$ -	\$ -	\$ 115,000	\$ 35,000	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -
58090 - Construction	\$ 450,000	\$ 315,000	\$ 400,000	\$ 350,000	\$ 300,000	\$ 250,000	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -
TOTALS:	\$ 674,000	\$ 585,500	\$ 590,250	\$ 792,917	\$ 655,800	\$ 436,000	\$ 101,400	\$ 76,720	\$ 212,500	\$ 7,300	\$ 13,900	

NOTE: FY 21/22 OPERATING CAPITAL OUTLAY BUDGET TO BE APPROVED WITH BUDGET

Construction Fund (Capital Projects)
FY23/24

Project Cost Estimate	Budget 22/23	Proposed Budget 23/24	INFORMATIONAL & PLANNING									
			24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
ITEM	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
2012 Bond	\$ 302,322	\$ 302,293	\$ 302,016	\$ 302,475	\$ 301,671	\$ 301,604	\$ -	\$ -	\$ -			
2017 Bond	\$ 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	\$ 1,079,929	\$ 1,080,423	
2019 Bond (2010 Rebonding)	\$ 704,760	\$ 703,011	\$ 705,495	\$ 706,888	\$ 712,224	\$ 701,702	\$ 705,204	\$ 702,762	\$ 699,439	\$ 700,021	\$ -	
Rebuild Filters 1-8 \$ 5,500,000				\$ 404,633	\$ 404,633	\$ 404,633	\$ 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	\$ 588,558	\$ 588,558	\$ 588,558
Elevated Tank Storage \$ 12,000,000				\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107
Clearwell #4												
Transmission Main - Chesdin Rd. to Pickett Rd												
Transmission Main - Pickett Ave. to Matoaca Tank												
Transmission Main - Matoaca Tank to Branders Bridge												
Transmission Main - Branders Bridge to Lakeview												
Totals	\$ 2,087,876	\$ 2,085,952	\$ 2,087,483	\$ 4,135,404	\$ 4,140,129	\$ 4,129,153	\$ 3,831,075	\$ 3,828,051	\$ 3,825,518	\$ 3,825,248	\$ 3,125,721	

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

Total Operating Capital Outlay and Construction Budget											
22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
\$ 2,761,876	\$ 2,671,452	\$ 2,677,733	\$ 4,928,321	\$ 4,795,929	\$ 4,565,153	\$ 3,932,475	\$ 3,904,771	\$ 4,038,018	\$ 3,832,548	\$ 3,139,621	

ARWA Budget comparisons

Year	O&M Expenses	Operating Capital Outlay	Debt Service 2010 issue	Debt Service 2012 issue	Debt Service 2017 issue	See Note (1) Debt Service 2019 issue	See Note (2) Debt Service 2026 issue	Reserve Policy	Total	Difference	% change	Comments
22/23	\$ 8,504,272	\$ 674,000		\$ 302,322	\$ 1,080,795	\$ 704,760		\$ -	\$ 11,266,148			
23/24	\$ 9,676,761	\$ 585,500		\$ 302,293	\$ 1,080,648	\$ 703,011		\$ -	\$ 12,348,213	\$ 1,082,065	10%	Reserve Fund is 50% of O&M
24/25	\$ 9,967,064	\$ 590,250		\$ 302,016	\$ 1,079,973	\$ 705,495		\$ -	\$ 12,644,797	\$ 296,584	2%	
25/26	\$ 10,266,076	\$ 792,917		\$ 302,475	\$ 1,080,744	\$ 706,888	\$ 2,045,298	\$ -	\$ 15,194,397	\$ 2,549,600	20%	
26/27	\$ 10,574,058	\$ 655,800		\$ 301,671	\$ 1,080,936	\$ 712,224	\$ 2,045,298	\$ -	\$ 15,369,987	\$ 175,590	1%	
27/28	\$ 10,891,280	\$ 436,000		\$ 301,604	\$ 1,080,550	\$ 701,702	\$ 2,045,298	\$ -	\$ 15,456,433	\$ 86,446	1%	

Notes:

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

(2) The debt service service shown in 2026 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

ARWA Projected Annual Cost

5 year projections - O&M, Operating Capital Outlay, Reserve Policy, 54.38% 2019 Series, 2012 Series, 2017

Series, and estimated 2026 Series

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	total
	73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
FY 23/24	\$ 8,810,832	\$ 646,413	\$ 459,530	\$ 1,814,861	\$ 295,862	\$ 12,027,499
FY 24/25	\$ 9,027,267	\$ 662,292	\$ 470,818	\$ 1,859,443	\$ 303,130	\$ 12,322,950
FY 25/26	\$ 10,894,530	\$ 799,285	\$ 568,206	\$ 2,244,063	\$ 365,831	\$ 14,871,915
FY 26/27	\$ 11,021,377	\$ 808,591	\$ 574,822	\$ 2,270,191	\$ 370,091	\$ 15,045,071
FY 27/28	\$ 11,088,220	\$ 813,495	\$ 578,308	\$ 2,283,959	\$ 372,335	\$ 15,136,317

Note: Budget % based on five year average flow consumption (FY17/18 to FY21/22)

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

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	total
Capacity	7.870%	5.760%	57.580%	0.000%	28.790%	100.000%
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
FY 26/27	\$ 25,571	\$ 18,715	\$ 187,087	\$ -	\$ 93,543	\$ 324,917
FY 27/28	\$ 25,193	\$ 18,439	\$ 184,323	\$ -	\$ 92,161	\$ 320,116

5 year projections - \$/year

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	TOTAL
FY 23/24	\$ 8,836,073	\$ 664,886	\$ 644,197	\$ 1,814,861	\$ 388,195	\$ 12,348,213
FY 24/25	\$ 9,052,597	\$ 680,830	\$ 656,138	\$ 1,859,443	\$ 395,789	\$ 12,644,797
FY 25/26	\$ 10,919,909	\$ 817,860	\$ 753,891	\$ 2,244,063	\$ 458,674	\$ 15,194,397
FY 26/27	\$ 11,046,948	\$ 827,306	\$ 761,908	\$ 2,270,191	\$ 463,634	\$ 15,369,987
FY 27/28	\$ 11,113,413	\$ 831,934	\$ 762,631	\$ 2,283,959	\$ 464,497	\$ 15,456,433

5 year projections - \$/1000 gallons

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	Average
Annual consumptions (1000 gallons)						11,333,539
Five year average flows (FY17/18 to FY21/22)	73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
FY 23/24	\$ 1.0643	\$ 1.0916	\$ 1.4877	\$ 1.0612	\$ 1.3924	\$ 1.2194
FY 24/25	\$ 1.0904	\$ 1.1177	\$ 1.5153	\$ 1.0873	\$ 1.4197	\$ 1.2461
FY 25/26	\$ 1.3153	\$ 1.3427	\$ 1.7410	\$ 1.3122	\$ 1.6452	\$ 1.4713
FY 26/27	\$ 1.3306	\$ 1.3582	\$ 1.7595	\$ 1.3275	\$ 1.6630	\$ 1.4878
FY 27/28	\$ 1.3386	\$ 1.3658	\$ 1.7612	\$ 1.3355	\$ 1.6661	\$ 1.4934

See Note (1) below

Notes:

(1) The FY25/26 figures include the proposed debt service for a 2026 Issuance. The projects for the issuance are still under consideration and the funding distribution has not been approved. These figures are subject to change.

Attachment #3

Recommended FY23/24 Budget

APPOMATTOX RIVER WATER AUTHORITY

Proposed: Janaury 26, 2023

Approved:

Revised:

Revision Approved:

PROPOSED OPERATION & MAINTENANCE BUDGET 2023/2024

	<u>FY2022/2023</u>	<u>FY2023/2024</u>	<u>FY22/23 to FY23/24</u>	
	Budget	Budget	\$ Change	% Change
O&M EXPENSES				
41000 · Salary	\$1,931,678	\$2,142,321	\$210,643	10.90%
42000 · Employee Benefits	\$801,994	\$864,051	\$62,057	7.74%
42100 · Employer FICA	\$147,773	\$163,888	\$16,114	10.90%
42200 · Virginia Retirement System	\$68,961	\$49,916	-\$19,045	-27.62%
42210 · Deferred Comp 457	\$0	\$0	\$0	0.00%
42300 · Hospitalization Insurance	\$544,275	\$606,440	\$62,165	11.42%
42400 · VRS Group Life Insurance	\$25,884	\$28,707	\$2,823	10.90%
42500 · Group Term Life	\$2,100	\$2,100	\$0	0.00%
42600 · Unemployment Insurance	\$1,000	\$1,000	\$0	0.00%
42800 · Employee Promotions	\$10,000	\$10,000	\$0	0.00%
42900 · Other Fringe Benefits - EAP	\$2,000	\$2,000	\$0	0.00%
42950 · OPEB Health Insurance Adj	\$0	\$0	\$0	
42952 · Net Pension Adjustment				
43000 · Contractual Services	\$1,152,600	\$1,218,289	\$65,689	5.70%
43121 · Auditing Services	\$13,000	\$13,000	\$0	0.00%
43122 · Accounting Services	\$16,000	\$16,000	\$0	0.00%
43124 · Part-Time Summer Interns	\$5,000	\$5,000	\$0	0.00%
43130 · Legal/Engineering and Reservoir Studies	\$50,000	\$50,000	\$0	0.00%
43140 · Consulting Engineers	\$85,000	\$75,000	-\$10,000	-11.76%
43150 · Legal Services	\$75,000	\$85,000	\$10,000	13.33%
43152 · Medical - Testing	\$5,000	\$5,000	\$0	0.00%
43155 · Other Consulting Services	\$0	\$0	\$0	0.00%
43156 · Admin and Maintenance Svc-SCWWA	\$8,000	\$0	-\$8,000	-100.00%
43160 · Trustee Services	\$12,000	\$12,000	\$0	0.00%

43162 - Bank Service Charges	\$2,000	\$2,100	\$100	5.00%
43170 - Research	\$17,500	\$17,500	\$0	0.00%
43180 - Potable Water Contract	\$520,000	\$585,589	\$65,589	12.61%
43190 - Samples and Tests	\$40,000	\$50,000	\$10,000	25.00%
43200 - Lake Patrol	\$4,000	\$4,000	\$0	0.00%
43201 - Reservoir Management - Invasive Control Program	\$25,000	\$25,000	\$0	0.00%
43210 - Software Support	\$50,000	\$50,000	\$0	0.00%
43220 - VPDES Permit Fee	\$15,000	\$15,000	\$0	0.00%
43310 - Repair Services	\$25,000	\$25,000	\$0	0.00%
43320 - Service Contracts	\$125,000	\$125,000	\$0	0.00%
43500 - Printing and Binding	\$3,000	\$1,000	-\$2,000	-66.67%
43600 - Grounds Maintenance	\$57,100	\$57,100	\$0	0.00%
45000 - Other Charges	\$1,098,000	\$1,197,100	\$99,100	9.03%
45110 - Electricity - Pumping	\$510,000	\$600,000	\$90,000	17.65%
45111 - Electricity - Purification	\$275,000	\$280,000	\$5,000	1.82%
45120 - Heating Fuel	\$60,000	\$65,000	\$5,000	8.33%
45130 - Trash Pickup	\$5,500	\$8,100	\$2,600	47.27%
45210 - Postal Services	\$2,500	\$1,500	-\$1,000	-40.00%
45220 - Freight	\$20,000	\$10,000	-\$10,000	-50.00%
45230 - Telecommunications	\$35,000	\$35,000	\$0	0.00%
45308 - General Liability Insurance	\$110,000	\$125,000	\$15,000	13.64%
45410 - Lease/Rent of Equipment	\$25,000	\$20,000	-\$5,000	-20.00%
45510 - Mileage Allowance			\$0	0.00%
45530 - Meals and Lodging	\$5,000	\$2,500	-\$2,500	-50.00%
45540 - Education and Training	\$25,000	\$25,000	\$0	0.00%
45550 - Safety Supplies	\$25,000	\$25,000	\$0	0.00%
46000 - Materials and Supplies	\$3,520,000	\$4,255,000	\$735,000	20.88%
46001 - Office Supplies	\$12,000	\$10,000	-\$2,000	-16.67%
46004 - Laboratory Supplies	\$83,000	\$85,000	\$2,000	2.41%
46005 - Purification Chemicals	\$2,990,000	\$3,750,000	\$760,000	25.42%
46006 - Purification Process and Janitorial Supplies	\$15,000	\$10,000	-\$5,000	-33.33%
46007 - Repair & Maint Supplies-Shop	\$210,000	\$210,000	\$0	0.00%
46008 - Vehicle and Equipment Fuels	\$25,000	\$40,000	\$15,000	60.00%
46009 - Vehicle and Equipment Supplies	\$20,000	\$15,000	-\$5,000	-25.00%
46010 - Equipment Parts and Small Equipment Purchases	\$55,000	\$25,000	-\$30,000	-54.55%
46011 - Uniforms	\$15,000	\$15,000	\$0	0.00%
46012 - Dues and Subscriptions	\$40,000	\$35,000	-\$5,000	-12.50%
46014 - Repair & Maint Supplies-IT	\$30,000	\$35,000	\$5,000	16.67%

46015 · Small Equipment Purchases	\$0	\$0	\$0	0.00%
46016 · Operations Supplies and Maintenance	\$25,000	\$25,000	\$0	0.00%
Total Operating Expenses	\$8,504,272	\$9,676,761	\$1,172,489	13.79%
58000 · Operating Capital Outlay	\$674,000	\$585,500	-\$88,500	-13.13%
Debt - 2010 Issue (Refunded as 2019 series)	\$0	\$0	\$0	0.00%
Debt - 2012 Issue	\$302,322	\$302,293	-\$29	-0.01%
Debt - 2017 Issue	\$1,080,795	\$1,080,648	-\$147	-0.01%
Debt - 2019 Issue (2010 Refunded)	\$704,760	\$703,011	-\$1,749	-0.25%
Total Debt	\$2,087,876	\$2,085,952	-\$1,925	-0.09%
Reserve Policy	\$0	\$0	\$0	0.00%
Total Expenses	\$11,266,148	\$12,348,213	\$1,082,065	9.60%

FY Budget Year		Revenues					
2023/2024		Appomattox River Water Authority					
Proposed		Jan. 26, 2023		Adopted		Revised	
		Revision Adopted					
		Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	Total
1) Operations and Maintenance Base Rate							
O&M Rate							
	\$/1000 gallons	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586
Estimated (\$/quarter)	\$	2,197,214	\$ 161,200.16	\$ 114,596	\$ 452,584	\$ 73,781	\$ 2,999,374.73
Total annual allocation	\$	8,788,856	\$ 644,801	\$ 458,384	\$ 1,810,334	\$ 295,124	\$ 11,997,499
% of flows		73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
Estimated (mgd)		22.746	1.669	1.186	4.685	0.764	31.051
Calc. annual usage (bg)		8.302	0.609	0.433	1.710	0.279	11.334
O&M =	\$ 9,676,761	Op. Cap. Outlay	\$ 585,500	54.38% 2019 Debt (maintenance)	\$ 382,297		
Int./Misc. Income	\$ 30,000	100% 2012 Debt	\$ 302,293	100% 2017 Debt	\$ 1,080,648	Reserve Policy	\$0
BASE RATE	\$/1000gals	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586	\$ 1.0586	
2) Expansion Rate							
Bonds	% Financed						
Rate (cents/1000 gals)		\$ 0.0030	\$ 0.0303	\$ 0.4265	\$ -	\$ 0.3312	
2019 expansion (\$/year)	45.62%	\$ 25,240	\$ 18,473	\$ 184,667	\$ -	\$ 92,333	\$ 320,714
% allocation	7.87%		5.76%	57.58%	0.00%	28.79%	100.00%
FY22/23 Bond Payments	2019 refunding =	\$ 703,011					
TOTAL DEBT SERVICE RATE	\$/1000 gals	\$ 0.0030	\$ 0.0303	\$ 0.4265	\$ -	\$ 0.3312	
	\$/year	\$ 25,240	\$ 18,473	\$ 184,667	\$ -	\$ 92,333	\$ 320,714
3) Total Rate							
TOTAL RATE (BASE + EXPANSION)	\$/1000gals	\$ 1.0616	1.0889	1.4851	1.0586	1.3898	\$ 1.2168
Estimated annual charges	\$/year	\$ 8,814,096	\$ 663,274	\$ 643,051	\$ 1,810,334	\$ 387,457	\$ 12,318,213
4) Budget Comparison (see note 1)							
FY23/24 Total Rate	\$/1000 gals	\$ 1.0616	\$ 1.0889	\$ 1.4851	\$ 1.0586	\$ 1.3898	\$ 1.2168
FY22/23 Total Rate	\$/1000 gals	\$ 0.9905	\$ 1.0179	\$ 1.4198	\$ 0.9874	\$ 1.3300	\$ 1.1491
Total Rate Difference	\$/1000 gals	\$ 0.0711	\$ 0.0710	\$ 0.0653	\$ 0.0712	\$ 0.0598	\$ 0.0677
Total Rate Difference	%	7.18%	6.98%	4.60%	7.21%	4.49%	5.89%
FY23/24 Revenues	\$/year	\$ 8,814,096	\$ 663,274	\$ 643,051	\$ 1,810,334	\$ 387,457	\$ 12,318,213
FY22/23 Revenues	\$/year	\$ 7,970,116	\$ 618,033	\$ 607,881	\$ 1,680,806	\$ 359,312	\$ 11,236,148
Annual Cash Difference	\$/year	\$ 843,980	\$ 45,241	\$ 35,170	\$ 129,529	\$ 28,145	\$ 1,082,065
FY23/24 Expenses	\$ 12,348,213	FY 23/24 Income Revenue	\$ 12,348,213				

NOTES:

Reserve Policy:

Reserve Policy Calculation

Appomattox River Water Authority FY23/24

ARWA O&M Budget	Reserves as of 6/30/2021	Revenue for FY2021/2022	Total expected reserves on 6/30/2022	Recommended 50% O&M Reserves	Annual Charge to achieve 50% Reserves
\$9,676,761	\$6,403,336	\$0	\$6,403,336	\$4,838,381	\$0

APPOMATTOX RIVER WATER AUTHORITY
Operating Capital Outlay - 58000
FY23/24

Acct#	Current Budget 22/23	Proposed Budget 23/24	INFORMATIONAL & PLANNING									
			24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
58010 - Machinery and Motors-Process	\$ 124,000	\$ 157,500	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
58020 - Instrumentation	\$ 100,000	\$ 68,000	\$ 58,000	\$ 30,000	\$ 115,000	\$ 35,000	\$ 35,000	\$ 25,000	\$ -	\$ -	\$ -	\$ -
58030 - SCADA	\$ -	\$ -	\$ -	\$ 15,750	\$ -	\$ -	\$ 10,000	\$ -	\$ 20,500	\$ -	\$ -	\$ -
58040 - Computer Equipmment	\$ -	\$ 15,000	\$ 20,250	\$ 5,500	\$ 25,800	\$ 11,000	\$ 6,400	\$ 51,720	\$ 7,000	\$ 7,300	\$ 13,900	
58050 - Furniture and Fixtures	\$ -	\$ 30,000	\$ -	\$ 130,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
58060 - Motor Vehicles	\$ -	\$ -	\$ 12,000	\$ 46,667	\$ 80,000	\$ 40,000	\$ 35,000	\$ -	\$ 110,000	\$ -	\$ -	\$ -
58065 - Maintenance Equipment	\$ -	\$ -	\$ -	\$ 115,000	\$ 35,000	\$ -	\$ 15,000	\$ -	\$ -	\$ -	\$ -	\$ -
58090 - Construction	\$ 450,000	\$ 315,000	\$ 400,000	\$ 350,000	\$ 300,000	\$ 250,000	\$ -	\$ -	\$ 75,000	\$ -	\$ -	\$ -
TOTALS:	\$ 674,000	\$ 585,500	\$ 590,250	\$ 792,917	\$ 655,800	\$ 436,000	\$ 101,400	\$ 76,720	\$ 212,500	\$ 7,300	\$ 13,900	

NOTE: FY 21/22 OPERATING CAPITAL OUTLAY BUDGET TO BE APPROVED WITH BUDGET

Construction Fund (Capital Projects)
FY23/24

Project Cost Estimate	Budget 22/23	Proposed Budget 23/24	INFORMATIONAL & PLANNING									
			24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
ITEM	22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
2012 Bond	\$ 302,322	\$ 302,293	\$ 302,016	\$ 302,475	\$ 301,671	\$ 301,604	\$ -	\$ -	\$ -			
2017 Bond	\$ 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	\$ 1,079,929	\$ 1,080,423	
2019 Bond (2010 Rebonding)	\$ 704,760	\$ 703,011	\$ 705,495	\$ 706,888	\$ 712,224	\$ 701,702	\$ 705,204	\$ 702,762	\$ 699,439	\$ 700,021	\$ -	
Rebuild Filters 1-8 \$ 5,500,000				\$ 404,633	\$ 404,633	\$ 404,633	\$ 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	\$ 588,558	\$ 588,558	\$ 588,558
Elevated Tank Storage \$ 12,000,000				\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107	\$ 1,052,107
Clearwell #4												
Transmission Main - Chesdin Rd. to Pickett Rd												
Transmission Main - Pickett Ave. to Matoaca Tank												
Transmission Main - Matoaca Tank to Branders Bridge												
Transmission Main - Branders Bridge to Lakeview												
Totals	\$ 2,087,876	\$ 2,085,952	\$ 2,087,483	\$ 4,135,404	\$ 4,140,129	\$ 4,129,153	\$ 3,831,075	\$ 3,828,051	\$ 3,825,518	\$ 3,825,248	\$ 3,125,721	

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

Total Operating Capital Outlay and Construction Budget											
22/23	23/24	24/25	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	
\$ 2,761,876	\$ 2,671,452	\$ 2,677,733	\$ 4,928,321	\$ 4,795,929	\$ 4,565,153	\$ 3,932,475	\$ 3,904,771	\$ 4,038,018	\$ 3,832,548	\$ 3,139,621	

ARWA Budget comparisons

Year	O&M Expenses	Operating Capital Outlay	Debt Service 2010 issue	Debt Service 2012 issue	Debt Service 2017 issue	See Note (1) Debt Service 2019 issue	See Note (2) Debt Service 2026 issue	Reserve Policy	Total	Difference	% change	Comments
22/23	\$ 8,504,272	\$ 674,000		\$ 302,322	\$ 1,080,795	\$ 704,760		\$ -	\$ 11,266,148			
23/24	\$ 9,676,761	\$ 585,500		\$ 302,293	\$ 1,080,648	\$ 703,011		\$ -	\$ 12,348,213	\$ 1,082,065	10%	Reserve Fund is 50% of O&M
24/25	\$ 9,967,064	\$ 590,250		\$ 302,016	\$ 1,079,973	\$ 705,495		\$ -	\$ 12,644,797	\$ 296,584	2%	
25/26	\$ 10,266,076	\$ 792,917		\$ 302,475	\$ 1,080,744	\$ 706,888	\$ 2,045,298	\$ -	\$ 15,194,397	\$ 2,549,600	20%	
26/27	\$ 10,574,058	\$ 655,800		\$ 301,671	\$ 1,080,936	\$ 712,224	\$ 2,045,298	\$ -	\$ 15,369,987	\$ 175,590	1%	
27/28	\$ 10,891,280	\$ 436,000		\$ 301,604	\$ 1,080,550	\$ 701,702	\$ 2,045,298	\$ -	\$ 15,456,433	\$ 86,446	1%	

Notes:

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

(2) The debt service service shown in 2026 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

ARWA Projected Annual Cost

5 year projections - O&M, Operating Capital Outlay, Reserve Policy, 54.38% 2019 Series, 2012 Series, 2017

Series, and estimated 2026 Series

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	total
	73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
FY 23/24	\$ 8,810,832	\$ 646,413	\$ 459,530	\$ 1,814,861	\$ 295,862	\$ 12,027,499
FY 24/25	\$ 9,027,267	\$ 662,292	\$ 470,818	\$ 1,859,443	\$ 303,130	\$ 12,322,950
FY 25/26	\$ 10,894,530	\$ 799,285	\$ 568,206	\$ 2,244,063	\$ 365,831	\$ 14,871,915
FY 26/27	\$ 11,021,377	\$ 808,591	\$ 574,822	\$ 2,270,191	\$ 370,091	\$ 15,045,071
FY 27/28	\$ 11,088,220	\$ 813,495	\$ 578,308	\$ 2,283,959	\$ 372,335	\$ 15,136,317

Note: Budget % based on five year average flow consumption (FY17/18 to FY21/22)

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

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	total
Capacity	7.870%	5.760%	57.580%	0.000%	28.790%	100.000%
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
FY 26/27	\$ 25,571	\$ 18,715	\$ 187,087	\$ -	\$ 93,543	\$ 324,917
FY 27/28	\$ 25,193	\$ 18,439	\$ 184,323	\$ -	\$ 92,161	\$ 320,116

5 year projections - \$/year

	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	TOTAL
FY 23/24	\$ 8,836,073	\$ 664,886	\$ 644,197	\$ 1,814,861	\$ 388,195	\$ 12,348,213
FY 24/25	\$ 9,052,597	\$ 680,830	\$ 656,138	\$ 1,859,443	\$ 395,789	\$ 12,644,797
FY 25/26	\$ 10,919,909	\$ 817,860	\$ 753,891	\$ 2,244,063	\$ 458,674	\$ 15,194,397
FY 26/27	\$ 11,046,948	\$ 827,306	\$ 761,908	\$ 2,270,191	\$ 463,634	\$ 15,369,987
FY 27/28	\$ 11,113,413	\$ 831,934	\$ 762,631	\$ 2,283,959	\$ 464,497	\$ 15,456,433

5 year projections - \$/1000 gallons

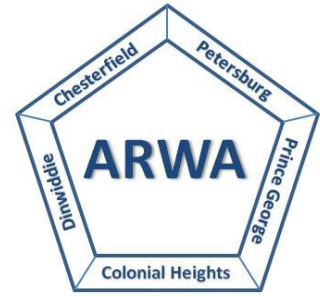
	Chesterfield	Colonial Heights	Dinwiddie	Petersburg	Prince George	Average
Annual consumptions (1000 gallons)						11,333,539
Five year average flows (FY17/18 to FY21/22)	73.256%	5.374%	3.821%	15.089%	2.460%	100.000%
FY 23/24	\$ 1.0643	\$ 1.0916	\$ 1.4877	\$ 1.0612	\$ 1.3924	\$ 1.2194
FY 24/25	\$ 1.0904	\$ 1.1177	\$ 1.5153	\$ 1.0873	\$ 1.4197	\$ 1.2461
FY 25/26	\$ 1.3153	\$ 1.3427	\$ 1.7410	\$ 1.3122	\$ 1.6452	\$ 1.4713
FY 26/27	\$ 1.3306	\$ 1.3582	\$ 1.7595	\$ 1.3275	\$ 1.6630	\$ 1.4878
FY 27/28	\$ 1.3386	\$ 1.3658	\$ 1.7612	\$ 1.3355	\$ 1.6661	\$ 1.4934

See Note (1) below

Notes:

(1) The FY25/26 figures include the proposed debt service for a 2026 Issuance. The projects for the issuance are still under consideration and the funding distribution has not been approved. These figures are subject to change.

Appomattox River Water Authority



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

Exhibit D

TO: Appomattox River Authority Board of Directors

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

DATE: March 16, 2023

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

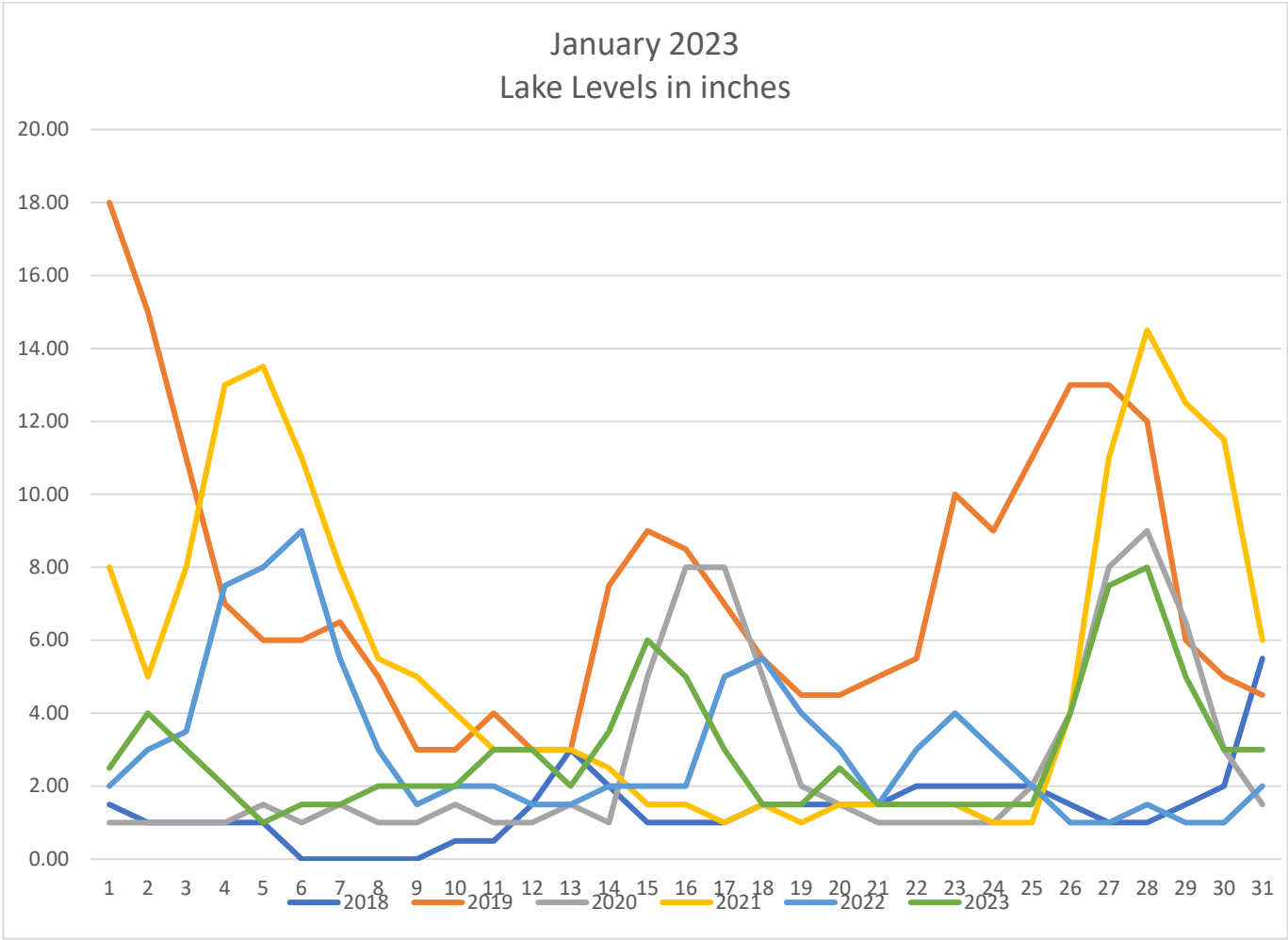
- The next scheduled Board of Directors Meeting is Thursday, May 18, 2022 at the Appomattox River Water Authority at 2:00 pm.
- Tour for Chesterfield County Board of Supervisor member and staff on February 4th.
- Executive director will be out of the office the week of June 5th through June 9th.
- Proposed Flushing dates for 2023:
 - Tuesday, March 14th – South Leg
 - Wednesday, March 15th – North Leg
 - Thursday, March 16th – Lakeview to Swift Creek

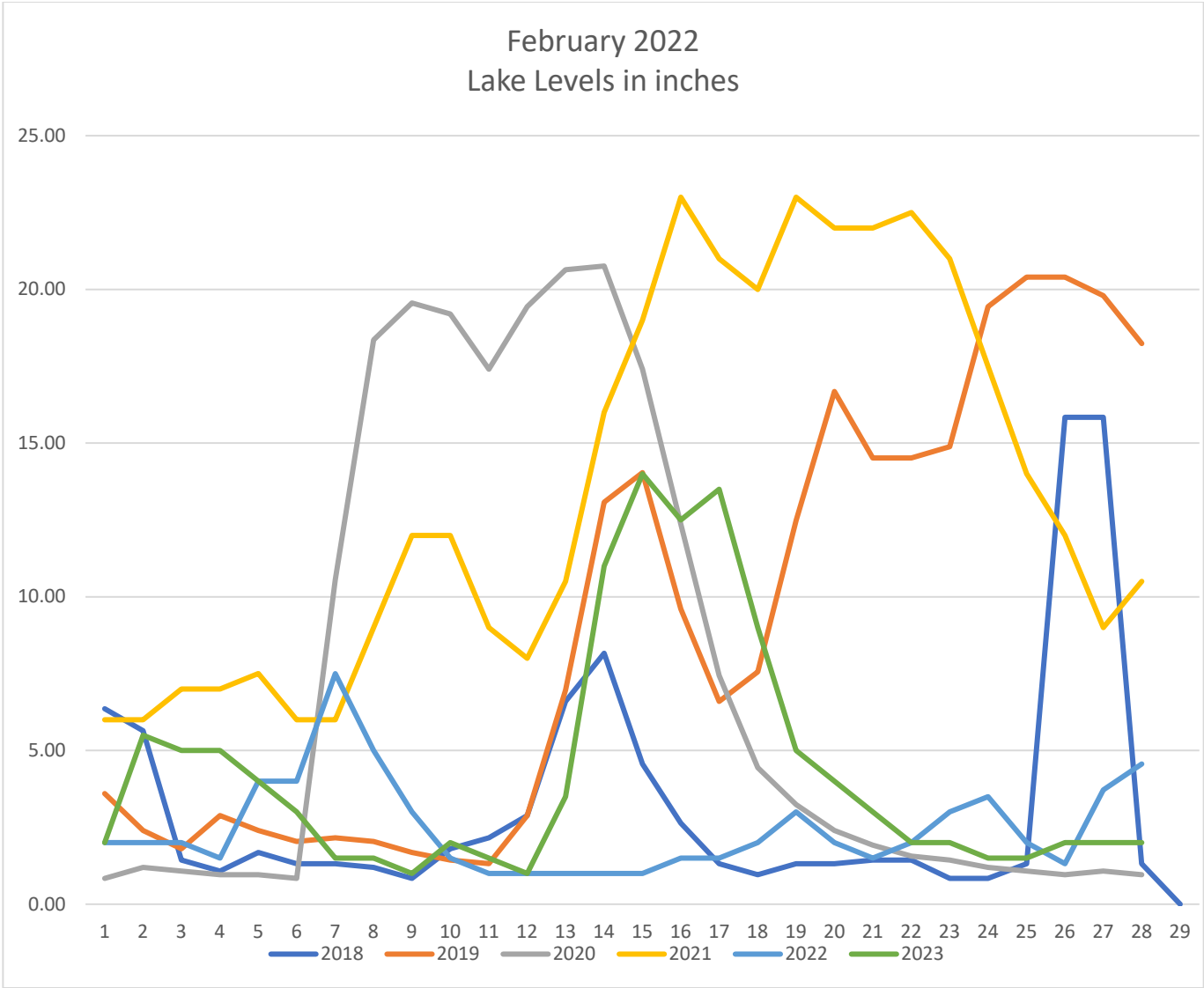
➤ September 17th Boating Accident on Lake

- Requested an update from First Sergeant Woodruff with the DWR. At the time of agenda preparation we do not have an update.

➤ Lake Level Update

- The weather has been gracious and the lake is overflowing. The current year is the green line.





Month	Stage 1 – Drought Watch			Stage 2 – Drought Warning			Stage 3 – Drought Emergency		
	Percent Usable Storage (%)	NAVD88 Elevation (ft msl)	NGVD29 Elevation (ft msl)	Percent Usable Storage (%)	NAVD88 Elevation (ft msl)	NGVD29 Elevation (ft msl)	Percent Usable Storage (%)	NAVD88 Elevation (ft msl)	NGVD29 Elevation (ft msl)
<i>Full Pool</i>	100	157.2	158	100	157.2	158	100	157.2	158
Jan	75	154	154.8	60	151.5	152.3	40	147.3	148.1
Feb	80	154.8	155.6	65	152.3	153.1	42.5	147.9	148.7
Mar	82.5	155.2	156	70	153.2	154	45	148.5	149.3
Apr	85	155.5	156.3	70	153.2	154	45	148.5	149.3
May	85	155.5	156.3	70	153.2	154	45	148.5	149.3
Jun	82.5	155.2	156	67.5	152.7	153.5	45	148.5	149.3
Jul	80	154.8	155.6	65	152.3	153.1	42.5	147.9	148.7
Aug	75	154	154.8	60	151.5	152.3	40	147.3	148.1
Sep	70	153.2	154	55	150.7	151.5	40	147.3	148.1
Oct	65	152.3	153.1	50	149.7	150.5	35	146	146.8
Nov	70	153.2	154	52.5	150.2	151	35	146	146.8
Dec	75	154	154.8	55	150.7	151.5	37.5	146.6	147.4

➤ Operations

- Contractor replaced the carbon caps in filters 13-22.
- Dropped water level in the east lagoon for toe drain installation by a contractor.
- Finished water met all permit requirements for January and February.
- The average daily finished water consumption for January was 29.94 mgd and the total withdrawn from the lake was 1.012 BG. The average daily finished water consumption for February was 28.79 mgd and the total withdrawn was 0.887 BG.

The maximum VWP permit criteria is:

- Daily maximum withdrawal is 86.24 mgd.
 - Monthly maximum withdrawal is 2.289 billion gallons.
 - Maximum annual withdrawal is 17.934 billion gallons (49.1 mgd average)
- The January 1st lake level was +2.5” and the February 28th lake level was +2.00”.
 - Operators dug out the damaged area of Filter #30 and performed a point repair.
 - Dewatered and cleaned basin #3.
 - Isolated and cleaned channel between flocculators 1 & 2 and basins 1,2, &3 for flume repair by contractor.
 - Setup temporary ammonia feed to flush out ammonia tanks and to install two new isolation valves between tanks 1 & 2. Valve replacement by maintenance staff. SCWWA welder welded stainless steel piping.

- Replaced fill line valve on ammonia tank #1.

➤ Maintenance

- Replaced the venturi's on filters #13 and #14 with mag meters and new butterfly valves and actuators.
- Replaced the sight tubes on Ammonia tanks #1 and #2. Calibrated the Rosemount transmitters to match the site tube readings.
- Moved the solar panels on the Dinwiddie side of the dam to provide a better power source for the remote camera.
- Removed mixer #2 broken shaft. Installed new stainless-steel shaft and reattached propellers.
- Repaired Clarivac #11 sludge drain valve and rehabbed the supporting valves.
- Re-piped 2" sodium chlorite leaking feed line and replaced valve.
- Completed 400 preventative maintenance work orders.
- Replaced broken vent line on sodium chlorite vertical tank.

➤ Instrumentation

- OT Firewall and IFIX conversion. IFIX conversion is to convert the SCADA system from Wonderware to the IFIX platform that is currently being used at SCWWA.
- Installing a new fiber communications run between the Raw Water Pump Station #1 and the new Raw Water Switchgear Building.
- Authored new computer security policy and protocol for staff. Providing staff training on new policy.
- Converting Win911 alarming to use local cellular router for text messaging.
- Working with SCADA vendor to deploy IFIX on SCADA One server.

➤ Laboratory

- Monthly eDMR submittals to DEQ for January and February.
- Monthly Compliance Monitoring Data Portal (CMDP – bac-t and chemistry) submitted to VDH.
- Monthly Water Quality Reports submitted industry.
- Whole Effluent Toxicity (WET) testing performed – no toxicity. Resolved eDMR differences with DEQ. Automated reports did not follow VPDES requirements. Pointed out to DEQ.
- Quarterly groundwater testing performed. Working on 2022 VPDES Annual Groundwater Monitoring Report that is scheduled for submittal by March 31st.
- FLOWCAM training for staff.
- Continue to work with Hazen on updating Lake Chesdin and Plant Management for Taste and Odor Plan.

➤ 30" Transmission Fortification

- New purchase order cut with Southern Construction to perform this work.

- Contractor is scheduling work.
 - No change from last report
- Liquid Lime System
- Contract executed.
 - Preconstruction meeting held.
 - Notice to proceed will be April 24th.
- Hydrilla
- Contacted consultant and requested a work plan and schedule for calendar year 2023 meetings.
- Docks
- Two new dock requests. Waiting for VRMC and the Corps approval.
 - Contractor installing Authority's dock.
- Bathymetric Study
- Ocean Surveys completed the field data gathering on January 28th.
 - Working on data processing and should have that task completed by the end of March.
- Annual Maintenance Inspection (AMI)
- 2022 report has been completed.
 - Appropriate items included in the capital improvement program.
- Tunnel Repair
- Contractor has removed door and exposed rebar. Contractor will be sealing and installing a new door.
 - March 7th staff drained plume for joint repair. This repair takes sedimentation basins #1, #2, and #3 out of service.
 - Repair should be complete prior to flushing.
- Miscellaneous
- Met with George of Whippernock Marina and discussed the location of the "No Wake" buoys at the entrance to Whippernock Creek. He did not have any issues with the proposed locations of the buoys.
 - Met with Mr. and Mrs. Sarver from 20281 Talon Point Court. Mr. Sarver has some safety concerns on the lake and would like to share them with the Board.

Exhibit E

Appomattox River Water Authority-Balance Sheet For Month Ending February 28, 2023

Assets

Current Assets

Petty Cash	\$	400
SunTrust Operating Fund	\$	2,873,371
SunTrust Replacement Fund	\$	-
<i>Total Unrestricted Cash</i>	\$	2,873,771

Water Revenue	\$	2,218,601
LGIP-O&M Reserve	\$	6,648,754
LGIP-Revenue Surplus	\$	3,031,279
ERRF (Equipment Repair/Replacement)	\$	2,558,975
Debt Service Reserve	\$	2,106,654
Bond Principal/Interest	\$	1,138,189
Bond Construction	\$	184,981
<i>Total Restricted Cash</i>	\$	17,887,433

Total Checking/Savings	\$	20,761,204
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Accounts Receivable	\$	14,841
Other Current Assets	\$	6,421
Inventory	\$	884,594

Total Current Assets	\$	21,667,059
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Fixed Assets

Right to Use Lease Assets	\$	21,869
Accum amort-right of use lease	\$	(5,921)
Land and Land Rights	\$	1,044,167
Water System	\$	85,932,231
Equipment	\$	1,960,167
Hydro	\$	34,873
Construction in Progress	\$	13,378,702
Accumulated Amortization	\$	(34,873)
Accumulated Depreciation	\$	(55,226,860)

Total Fixed Assets	\$	47,104,355
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Other Assets

Def Outflow-OPEB GLI	\$	-
Def Out Res-Post ER Pension Costs	\$	36,260
Deferred Outflow-OPEB GLI	\$	23,546
Def Out Res-Net Dif Pension Inv	\$	-
Def Out Res-OPEB Experience	\$	36,839
Def Out Res-OPEB Assumptions	\$	4,592
Def Out Res-OPEB Subsequent	\$	13,173

Total Other Assets	\$	114,410
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Total Assets	\$	68,885,824
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Appomattox River Water Authority-Balance Sheet

For Month Ending February 28, 2023

Liabilities & Equity

Current Liabilities

Accounts Payable	\$	21,507
Retainage Payable	\$	15,468
Accrued Interest Payable	\$	116,996
Accrued Interest-GASB 87	\$	36
Lease Liability-current portion	\$	5,850

Total Current Liabilities

\$ 159,858

Long Term Liabilities

Def Inf Res-Net Dif Pension Inv	\$	325,532
Def Inf Res-Pen Chg Assumptions	\$	(134,527)
Def Inf Res-Pens Dif Proj/Act E	\$	808,579
Net Pension Liability	\$	(1,687,965)
Def Infl-OPEB Chg of Assumptions	\$	158
Deferred Inflow-OPEB GLI	\$	42,737
Deferred Inflow-Expect & Actual	\$	5,992
Bonds Payable-2010	\$	-
Bonds Payable-2012	\$	1,654,000
Bonds Payable-2017	\$	9,553,000
Bonds Payable-2019 Refunding Bond Payment	\$	5,630,000
Bonds Payable-2019 Def Amt on Refunding	\$	(83,288)
Lease Liability-non-current	\$	10,275
Accrued Leave Payable	\$	204,282
Post Employment Benefit	\$	129,956
OPEB Liability-GLI	\$	81,499

Total Long-Term Liabilities

\$ 16,540,230

Total Liabilities

\$ 16,700,088

Equity

Retained Earnings	\$	2,705,054
Reserve for Water Revenue	\$	5,129,019
Reserve for Operations	\$	3,059,424
Reserve for Suplus	\$	2,529,242
Reserve for Replacements	\$	2,500,000
Reserve for Bond Interest	\$	116,996
Reserve for Debt Service	\$	2,094,831
Reserve for Bond Principal	\$	1,640,000
Reserve for Reserve	\$	4,252,136
Fixed Assets, Net of Debt	\$	29,144,730

Net Income	\$	(985,696)
Total Equity	\$	52,185,736

Total Liabilities & Equity

\$ 68,885,824

\$ -

Appomattox River Water Authority
YTD Income Statement for the period ending February 28, 2023

Water Rate Center

Revenues and Expenses Summary

Budget	Budget	Actual	YTD Budget	Variance
FY 22/23	Year-to-Date	Year-to-Date	vs. Actual	Percentage

Operating Budget vs. Actual

Revenues

Water Sales	\$ 11,236,148	\$ 5,618,074	\$ 6,087,548	\$ 469,474	8.36%
Rent/Misc. Income	\$ 30,000	\$ 15,000	\$ 5,305	\$ (9,695)	-64.63%
Total Operating Revenues	\$ 11,266,148	\$ 5,633,074	\$ 6,092,853	\$ 459,779	8.16%

Expenses

Personnel Cost	\$ 2,733,672	\$ 1,822,448	\$ 1,772,739	\$ (49,709)	-2.73%
Contractual/Professional Services	\$ 1,152,600	\$ 768,400	\$ 624,579	\$ (143,822)	-18.72%
Utilities	\$ 850,500	\$ 567,000	\$ 749,696	\$ 182,696	32.22%
Communication/Postal/Freight	\$ 57,500	\$ 38,333	\$ 29,466	\$ (8,867)	-23.13%
Office/Lab/Janitorial Supplies	\$ 110,000	\$ 73,333	\$ 75,533	\$ 2,200	3.00%
Insurance	\$ 110,000	\$ 110,000	\$ 124,847	\$ 14,847	13.50%
Lease/Rental Equipment	\$ 25,000	\$ 16,667	\$ 10,921	\$ (5,745)	-34.47%
Travel/Training/Dues	\$ 70,000	\$ 46,667	\$ 42,070	\$ (4,597)	-9.85%
Safety/Uniforms	\$ 40,000	\$ 26,667	\$ 20,185	\$ (6,482)	-24.31%
Chemicals	\$ 2,990,000	\$ 1,993,333	\$ 2,136,624	\$ 143,291	7.19%
Repair/Maintenance Parts & Supplies	\$ 312,000	\$ 208,000	\$ 288,102	\$ 80,102	38.51%
Total Operating Expenses	\$ 8,451,272	\$ 5,670,848	\$ 5,874,761	\$ 203,913	3.60%
Operating Results Suplus/(Deficit)	\$ 2,814,876	\$ (37,774)	\$ 218,091	\$ 255,865	-677.36%

Replacement Outlay Budget vs. Actual

Machinery & Motors-Process	\$ 124,000	\$ 82,667	\$ 108,828	\$ 26,161	31.65%
Instrumentation	\$ 100,000	\$ 66,667	\$ 218,267	\$ 151,600	227.40%
IFIX Upgrade	\$ -	\$ -	\$ 12,526	\$ 12,526	#DIV/0!
SCADA	\$ -	\$ -	\$ 28,200	\$ 28,200	#DIV/0!
Furniture/Fixtures	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Maintenance Equipment	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Valve Replacement	\$ 75,000	\$ 50,000	\$ 37,981	\$ (12,019)	-24.04%
Stop Logs at RWPS1	\$ 250,000	\$ 166,667	\$ 4,636	\$ (162,030)	-97.22%
Security Infrastructure Upgrade	\$ -	\$ -	\$ 7,658	\$ 7,658	#DIV/0!
Dock Improvements	\$ 25,000	\$ 16,667	\$ 27,893	\$ 11,226	67.36%
Lagoon Splitter Box Access	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Sedimentation Basin Improvements	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Single Pane Windows	\$ 100,000	\$ 66,667	\$ 87,750	\$ 21,083	31.62%
Filter #1 Replacement	\$ -	\$ -	\$ 209,409	\$ 209,409	#DIV/0!
Carport-Slab-Fence	\$ 53,000	\$ 53,000	\$ 53,654	\$ 654	1.23%
Total Capital Outlay	\$ 727,000	\$ 502,333	\$ 796,802	\$ 84,406	16.80%

Construction Outlay Budget vs. Actual

In-Plant Capital Upgrade	\$ -	\$ -	\$ 29,232	\$ 29,232	#DIV/0!
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BOD Designated Surplus Fund

Liquid Lime System	\$ -	\$ -	\$ 46,625	\$ 46,625	#DIV/0!
Firewall Upgrade	\$ -	\$ -	\$ 19,078	\$ 10,196	#DIV/0!
Replacement Doors	\$ -	\$ -	\$ 17,536	\$ 17,536	#DIV/0!
VWP Permit	\$ -	\$ -	\$ 40,280	\$ 40,280	#DIV/0!
FlowCam	\$ -	\$ -	\$ 122,257	\$ 122,257	#DIV/0!

Debt Service Budget vs. Actual

Interest Income	\$ -	\$ -	\$ 379,270	\$ 379,270	#DIV/0!
Other (Income)	\$ -	\$ -	\$ 4	\$ 4	#DIV/0!

Sell of Asset	\$ -	\$ -	\$ 7,500	\$ -	#DIV/0!
Interest Expense	\$ 447,876	\$ 447,876	\$ 233,993	\$ (213,883)	-47.75%
Int on Purchase of US Treas	\$ -	\$ -	\$ 29,760	\$ 29,760	#DIV/0!
Bond Issuance Cost	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Principal Payments	\$ 1,640,000	\$ 1,640,000	\$ 255,000	\$ (1,385,000)	-84.45%

Other Income/Other Expense

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

**Appomattox River Water Authority
Executive Review
Cash And Debt Highlights
As of February
28, 2023**

Highlights: ARWA Cash Positions		30-Jun-22		28-Feb-23	Change	Explanation
Unrestricted Cash & Investments:						
Petty Cash	\$	400.00	\$	400.00	\$ -	see explanation (a) below
SunTrust Operating Account	\$	1,962,064.46	\$	2,873,370.96	\$ 911,306.50	see explanation (b) below
SunTrust Replacement Fund	\$	-	\$	-	\$ -	see explanation (c) below
Restricted Cash and Investments:						
Water Revenue	\$	3,041,305.97	\$	2,218,601.11	\$ (822,704.86)	see explanation (d) below
LGIP-O&M Reserve	\$	6,008,559.41	\$	6,648,754.08	\$ 640,194.67	see explanation (e) below
LGIP-Revenue Surplus	\$	2,529,241.78	\$	3,031,278.51	\$ 502,036.73	see explanation (f) below
ERRF (Equipment Repair/Replacement)	\$	2,500,000.00	\$	2,558,975.00	\$ 58,975.00	see explanation (g) below
Debt Service Reserve	\$	2,094,831.09	\$	2,106,654.12	\$ 11,823.03	see explanation (h) below
2012 Bond Principal/Interest	\$	280,741.56	\$	632,811.84	\$ 352,070.28	
2017 Bond Principal/Interest	\$	960,986.29	\$	5,831.59	\$ (955,154.70)	
2019 Bond Principal/Interest	\$	632,913.93	\$	499,545.59	\$ (133,368.34)	
2017 Construction	\$	210,679.88	\$	184,981.28	\$ (25,698.60)	
Total Cash and Investments	\$	20,221,724.37	\$	20,761,204.08	\$ 539,479.71	

Highlights: ARWA Outstanding Bonds		30-Jun-22		28-Feb-23	Change
2012 Bond	\$	1,654,000.00	\$	1,654,000.00	\$ -
2017 Bond	\$	10,383,000.00	\$	9,553,000.00	\$ (830,000.00)
2019 Bond	\$	6,185,000.00	\$	5,630,000.00	\$ (555,000.00)
2019 Bond-Def Amt on Refund	\$	(83,288.25)	\$	(83,288.25)	\$ -
Total Bonds Outstanding	\$	18,138,711.75	\$	16,753,711.75	\$ (1,385,000.00)

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. Board Approval: Surplus Revenue approved for specific projects.
- g. Financial Policy: Must maintain a minimum of \$2.5M
- h. Financial Policy: Held by Trustee, funded at such amount as may be necessary.

[illegible]

2022	\$	1,601,000.00	\$	487,456.03	\$	2,088,456.03
2023	\$	1,640,000.00	\$	447,876.21	\$	2,087,876.21
2024	\$	1,679,000.00	\$	406,951.58	\$	2,085,951.58
2025	\$	1,723,000.00	\$	364,483.12	\$	2,087,483.12
2026	\$	1,770,000.00	\$	320,106.38	\$	2,090,106.38
2027	\$	1,821,000.00	\$	273,831.09	\$	2,094,831.09
2028	\$	1,858,000.00	\$	225,855.20	\$	2,083,855.20
2029	\$	1,605,000.00	\$	180,776.72	\$	1,785,776.72
2030	\$	1,644,000.00	\$	138,753.27	\$	1,782,753.27
2031	\$	1,685,000.00	\$	95,219.57	\$	1,780,219.57
2032	\$	1,730,000.00	\$	49,950.17	\$	1,779,950.17
2033	\$	1,067,000.00	\$	13,422.86	\$	1,080,422.86