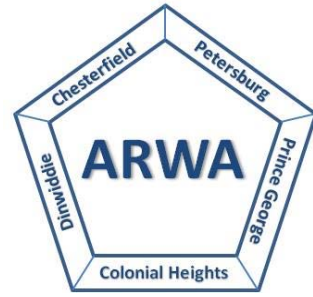


Appomattox
River
Water
Authority



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

Appomattox River Water Authority
Board of Directors Meeting

DATE: January 18, 2018

TIME: 2:00 PM

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

AGENDA

1. Call to Order/Roll Call
2. Approval of Minutes: Minutes of the Regular Board Meeting on November 16, 2017
3. Public Comment
4. Executive Director's Report:
 - Reservoir Status Update for December/January 2017/2018
 - Presentation by Steven Nebiker- HydroLogics: 2017 Reservoir Modeling Results Compared to 2013 Modeling Results
 - Approval of Contractor Prequalification Process
 - Need for Special Meeting on April 26, 2018
 - Annual Flushing Notice
 - Status Report: 6 Month Work Plan Update/Ongoing Projects/Financials
 - Presentation of Proposed FY 2018/19 Operating Budget
5. Items from Counsel
6. Closed Session
7. Other Items from Board Members/Staff Not on Agenda
 - Financial Disclosures
8. Adjourn

Cc: W. Dupler/G. Hayes, Chesterfield
J. Byerly, Petersburg Public Works
W. Henley, Colonial Heights
R. Wilson, Dinwiddie Water Authority
A. Anderson, McGuire Woods

1. Call to Order/Roll Call

2. Approval of Minutes: Minutes of the Work Session on October 19, 2017 and the Regular Board Meeting on November 16, 2017.

Following are the Minutes of the Work Session on October 19, 2017 and the Regular Board Meeting on November 16, 2017.

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

BOARD OF DIRECTORS WORK SESSION MEETING

**Appomattox River Water Authority and South Central Wastewater Authority
October 19, 2017 at 1:00 p.m.**

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

PRESENT:

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

ABSENT:

William Henley, (Alternate, Colonial Heights)
William Dupler, (Alternate, Chesterfield)

STAFF:

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

OTHERS:

John Mastracchio, (Raftelis)
Seth Garrison, (Raftelis)
Jimmy Sanderson, (Raftelis)
Scott Morris, (Chesterfield County Utilities)
March Altman, (Petersburg)

Mr. Ashcraft, Chairman, called the meeting to order at 1:03 p.m.

1. Call to Order/Roll Call.

The roll was called.

2. In-Plant Project Funding Committee (Casey & Ferrell-Benavides)

Dr. Casey reported on the In-Plant Project and introduced Ted Cole with Davenport. Dr. Casey stated that he, Ted Cole, Ms. Ferrell-Benavides, George Hayes, Jerry Byerly, Dr. Wichser and Arthur Anderson visited the Virginia Resources Authority (VRA) on October 16, 2017. He stated that this was their first Committee meeting but the purpose was to illustrate to VRA our intentions, that ARWA by itself would be issuing the debt and SCWWA was not part of this conversation. He further stated that to VRA's credit, they had five people around the table including the Interim Director and the former Director who were familiar with this transaction. He stated there were honest discussions about abilities to refund any borrowed funds. He further stated we've been talking about this In-Plant Project, which we view as a necessity based project for the care and maintenance of our system. It was viewed as something so important two years ago that we had it imbedded in our capital budget and in essence had a rate structure adopted to be prepared to fund debt service. He stated they made the point clear to VRA that Petersburg has been paying their debt service to ARWA during the last two years. He further stated that VRA heard, understood and respected us. Dr. Casey stated what they were trying to do, where we were going in with the presumption that we would need to have moral obligations from four of the ARWA members towards a fellow member/locality. He further stated what they are trying to figure out is what each of us may need to do to disclose to our own Boards our own commitments for our own shares and not trying to cover someone else whether they pay or don't pay.

Dr. Casey stated that we are just making a statement that it is our intent to pay, and if we don't pay our own shares, that our own state intercept programs that VRA has for our own issuances that we deal directly with VRA, they use it as a back stop for their own debt. He further stated if any one of us pays, it's not intercepting someone else's sales tax and there would be no mention of other localities specifically in any of our individual resolutions. He stated that VRA may not be the only game in town. Dr. Casey stated that Mr. Cole and Davenport will give us an informed decision of a traditional bank loan process, which may have a shorter amortization schedule. He further stated if the rates are low it may be within the debt service capacities that we have or the debt service imputed in our budgets. He stated Mr. Cole could go through that exercise prior to the spring issuance of VRA, and we can be on both tracks and hopefully be poised to make an informed decision. He further stated he and Ms. Ferrell-Benavides felt confident that by the springtime we can have the funding for the "In-Plant" capital project. He stated we are in action mode right now with the soft costs which this Board has approved to do thus far. There is nothing slowing down the projects, and whether it's a bank loan, which Mr. Cole feels it's completely permissible for this Authority to get, or the VRA, which again they need to confirm to us. He stated we are doing the due diligence on the "In-Plant" capital project.

Discussion with Davenport

Mr. Cole stated that he thought it was a good meeting as we brought some things to light with them that would give them at VRA an opportunity to look at a term sheet for ARWA a little differently. He further stated the primary sticking point has been that series of moral obligations that they (VRA) want to cover Petersburg's share. He stated if you think about your credit, you can pledge your revenues, and each of the five members can do a moral obligation for their own share. He further stated the sticking point was the additional level of moral obligation with the other four members to cover Petersburg. He stated he felt we provided VRA information and concepts that might allow them to get to a place where they can approve the credit without the additional Petersburg specific moral obligation. He further stated they are looking at that, and the next scheduled opportunity for VRA would be the spring of 2018. He stated VRA has an application process that would kick off in February 2018 so we are not talking about an immediate opportunity with VRA to participate in a funding program. He thinks we have started the conversation appropriately, so that if we find that's the preferred method, we should be in a position to participate in the spring. He stated something we did do in August of 2016 for these projects, and something he would recommend we move forward with an RFP for a bank loan to compare with VRA. He further stated they have drafted it in the event that members would want Davenport to move forward with it. It is a non-obligation process, which means they go out and solicit proposals from banks for the borrowings.

Mr. Cole stated the RFP is out for about three weeks and they bring it back and they would set out a schedule where they could come back to the next scheduled Board meeting in November with the results of that RFP. They would assess the results with interest rates, terms of conditions, how it compares to a VRA program, and, at the November meeting, give everyone an opportunity to say how to proceed. He stated if nothing materializes or is compelling, the RFP process is just set to the side and they would focus on the other efforts. He further stated as they look at the Authority's credit for these projects we are talking \$13-14 million. The Authority has had an excellent financial performance on all key metrics that a bank would look at; debt service coverage, cash flow and reserves. He stated he is cautiously optimistic that we should receive some reasonable proposals from banks, but we won't know until we request it and bring it back. That is something they need direction on if they should go ahead and get that. They are in a position to send it out tomorrow. Mr. Cole stated, Mr. Anderson and Dr. Wichser have reviewed the RFP and it is a straight forward document. He asked the Board to think about if we were to get a bank proposal that was compelling. The question would become, are all of you in a position to want to move forward to a closing on a bank loan in the November, December or even January time frame prior to these projects being fully bid.

He stated another question is if we do move forward, how do we size the bond issue? He asked do we work off the engineer's estimate as that's the best information we have, and what do we do in the event that bids in February/March come in a little bit higher? He stated if they come in lower it wouldn't be a problem. He asked if we were to get a viable bank option are we ready to move forward with the borrowing prior to the projects being bid or not. He stated he felt it was solely the Board's decision and that he didn't think outside influence that said you need to bid your projects first, and Mr. Anderson stated unless it comes back with one of the bank's, but there is nothing that compels the Authority otherwise. Mr. Cole stated this doesn't have to be decided today but maybe in November if they come back with a handful of banks that are interested. He further stated if we decide to wait he doesn't think those banks go away, but their interest rates and proposals may change as we go into 2018, however, their interest and their credit is unlikely to expire. Mr. Cole suggested we wait and see what we get from the RFP process before we make any firm decisions. He stated the VRA conversation can evolve even if we get a good bank financing. He further stated he thinks at some point in the future we may find other needs for you and get some other clarity from VRA even if they are not going to fund the In-Plant Project. He stated, they asked VRA at what point with what sort of performance from Petersburg we can evolve back to a more normal looking financing process with them.

Dr. Casey stated that part of him says it would not hurt to know the environment for the bank loan and kind of requirements they may put on us that we are not otherwise aware of to know which is the lesser of the two, not just the interest rate process, not just the flexibility, but what resolutions they might want our own governing bodies to state. He stated he thinks the proposal is not a traditional proposal that we may be used to. He further stated they can say you almost need to frame the terms and conditions by which ARWA could issue such loan to such institution.

Dr. Wichser stated it's a good RFP and he would recommend that we go with it. Mr. Ashcraft asked what it would be if it was a downside to going ahead and moving forward to bid the project and Dr. Wichser replied we are only about 50% of design that's not scheduled to be finished until the end of December. He further stated the bid documents have to be prepared and that would take the engineers a few weeks. It should be ready to be bid by the third or fourth week of January. Mr. Ashcraft asked if we were a couple of months ahead with this and Dr. Wichser replied that was one question he might have if a kicker be put in here. Mr. Ashcraft stated Mr. Cole knows they were holding until December 15th and could we broaden that out to sixty or ninety days and Mr. Cole replied he could see the point and we may be able to. He stated one way to remedy that would be to ask for an extended rate lock period. He stated normally thirty to forty-five days is standard and requesting longer may cost you something but that would be the lesser of two evils. He further stated we could assess that when they come in. He stated as part of the RFP process the benefit is to identify that universe of banks that are willing to participate. He further stated it would be helpful to know that sooner, even if we are not quite ready to close as early as December, we have to work with them to either extend the rate lock or refresh their interest rate bid in January if we are not ready to close. Dr. Casey stated we need to be sensitive to time lines as Chesterfield only has one Board meeting per month and their December meeting date was moved up earlier, if there is a sense that any of the bank loans require us to report back to our local bodies and/or getting some resolution for them. He further

stated that we have to let you know the Board meeting dates for such action, as we may need that date to be later than December 15th. Mr. Cole stated the way the indenture is written, which we have put out is the credit, if they bid on this in a way that is consistent with that, it wouldn't be any member jurisdictions Board approvals and Mr. Anderson replied correct. Mr. Cole stated only if they put in there something that was not contemplated but we won't know that. He further stated if there were terms and conditions like that it would definitely push us into January.

Mr. Ashcraft said what he was having trouble understanding is, if any of us had a \$13-14 million project in our locality, we would be seeking financing from all sources, but right now we are doing it separately. He asked if typically, we would be doing all that at one time and Mr. Cole replied we would typically try and look at a bank option compared to VRA, so you could make that decision but in a normal sense. He stated they could model this for us easily. He further stated what is difficult is knowing how to model the bank. He further stated he could tell it was going to be 3.5% for fifteen or twenty years but we won't know until we actually get those proposals because every bank is going to be different.

Ms. Ferrell-Benavides arrived at 1:22 p.m.

Mr. Cole stated we needed to isolate those, and in our case, it was not just the best option, at some level it's do we have an option with all the complexities going on with certain members. Mr. Ashcraft stated to Mr. Cole that you needed the bank information to compare it with what you already know about VRA notwithstanding the moral obligation and Mr. Cole replied correct with VRA he could say where the interest rate would be today. He stated the question with VRA would be here is the interest rate and then the unknown would be what are their additional terms and conditions beyond their normal program. Mr. Ashcraft asked if they would offer their opinion prior to that. Dr. Casey stated he would like to encourage all of us to look online and look at the VRA Board of Directors as we know many of them because they are respected peers. He further stated that Rue Harris is the Vice-Chair. Dr. Casey stated he thought it was the unknown of VRA as when is VRA's Board of Directors meeting. It's governed by our peers. They know how we operate better by what we can and can't do.

Mr. Ashcraft asked if they left that meeting anticipating some letter coming to the Authority saying they were going to accept this. Mr. Cole stated what it really boiled down to is what they have already provided, which is the series of moral obligations that is the base case. He further stated the viable alternative that VRA is looking at, is there an amount of unrestricted reserves that the Authority has, that could be Board restricted and VRA restricted to serve as an additional level of collateral for Petersburg's share. Mr. Cole stated the question becomes is that \$1 or \$2 million what Petersburg owes over the entire term of the loan which could be \$3 or \$4 million. He stated they fall somewhere in between there and, if they can do that, then that would eliminate the need to do that special moral obligation. Dr. Casey stated one of his concerns is that it may be twenty years if we have to put \$1 million of our monies we've saved up in the bank in a special escrow account for one or two years, but whatever the determining factor is, that's giving VRA pause with Petersburg. He further stated if it goes away, we don't need to be carrying some special escrow for twenty years if in three years the burdens are lifted. He would want whatever agreements not to encumber this Authority for the duration of the loan. He further stated a slight variation on what he explained is there may be an opportunity to borrow an additional amount of money to fund that additional level of reserves rather than encumbering cash that you have accumulated. He knows the cash is there for emergencies and other things and, if it's encumbered, it will restrict your ability to use it. One alternative that gets you to the same place is if VRA says they need \$1 or \$2 million of additional reserves we may be able to include that in the borrowing, so we are increasing the size of the borrowing, but you are not having to restrict monies you have already accumulated. We can ask VRA for a more specific time table for the decision on those things to coincide with this bank process so you have as much information as possible.

Mr. Ashcraft stated all the information collected could help us make a decision. He asked about the pre-ordering and how it interfaced with what we have learned since the last meeting. Dr. Wichser replied as was stated at the last Board meeting, with pre-ordering we could shave approximately twelve months off the project. There is a potential to save half a million dollars in costs and we would expect pre-ordering to be invoiced in eleven to twelve months from when we order. Mr. Cole stated that you would be pre-ordering perhaps without having a known source of long term funding depending on timing of pre-ordering and these other things. Mr. Ashcraft stated he thinks we are on page where we need to be for these projects. He asked what is the best recipe for this and if pre-ordering saves money its' reasonable. Mr. Ashcraft asked members if we want to give guidance to the Authority to move with RFP's for bank information and Dr. Wichser said the plan is to have the RFP's issued on October 20, 2017, which are due back on November 8, 2017 and be ready for the November 16, 2017 Board meeting with the results. Mr. Ashcraft asked the Committee if it was a too hurried process and Dr. Casey said if he needed to update his Board on something and he would only have two more meetings to do so. He stated he didn't know the date of the second Wednesday in December but he needed that time period to be passed that point. Mr. Cole stated his understanding was that this Board doesn't meet in October, but if there were the ability to hold a meeting that would provide more flexibility. If there were a meeting in December they would allow the RFP to be out on the street a little longer. He asked Mr. Anderson if we needed locality Boards' input and Mr. Anderson replied not unless they come back with a requirement.

Upon a motion made by Dr. Casey and seconded by Ms. Ferrell-Benavides the following resolution was adopted:

RESOLVED, that the Board gives guidance to the Authority staff to move forward with the RFP's for bank information:

For: 5 Against: 0 Abstain: 0

Discussion as needed

3. Davenport/Raftelis presentation of draft ARWA Valuation/Governance Report

Mr. Cole stated with this Raftelis report you will see he deliverable from Raftelis for Task #1. He further stated depending upon conversations today; there may be a need to do some tweaking. Based on his and Raftelis' opinion this is largely the deliverable for Task #1 as authorized.

Mr. Cole introduced John Mastracchio and Seth Garrison of Raftelis. Mr. Mastracchio went over the Valuation Report Section. He stated that Phase #1 of the Preliminary Valuation Assessment involved valuing water system assets using several methods. In valuing the assets, they utilized three of the methods (Cost Approach, Income Approach, Sales Comparison Approach and Rate Base Approach). He further stated that estimates under each of these methods varied. Mr. Mastracchio stated they looked at what it would cost to replace the system today deducting for age and condition. He stated that value was estimated at about \$156 million. He further stated they also converted this cost per MGD of capacity that then translates to \$2.2 million per MGD of capacity. He stated with the Income and Sales Approach they didn't find anything since 2015 directly comparable with the exception of a project underway in Henrico County. He further stated that project is a \$280 million project, which will provide raw water to Henrico County and will provide 47 MGD per day capacity. The cost per unit of capacity new is about \$6 million per MGD. He stated they looked at the Rate Base Approach by looking at original cost of the facility and then deducting depreciation factoring in aging condition on the system and that value estimate came in around \$1.4 million per MGD or just under \$100 million. Mr. Mastracchio stated when you combine these three approaches the overall range is in the \$100 million to \$327 million in total.

Mr. Mastracchio stated this is a preliminary assessment and there are a number of items that make it preliminary. He stated the first reason for the preliminary assessment is the value range provided also has an estimate of the value of land at \$6,000 - \$7,000 per acre. He further stated that right along the reservoir they saw some land valued at \$40,000 per acre. They took the perspective of undeveloped land as the basis of their evaluation. Mr. Mastracchio stated the second reason for preliminary is they discussed with ARWA and corresponded with a dam engineer; they had the indication that replacement costs of Brasfield dam may be understated in the valuation report. He further stated as more information is gathered and becomes available in terms of replacements costs, that's one area they can re-assess. Mr. Mastracchio stated the third reason is related to the fixed assets records provided by ARWA. He reported there appears to be no assets on that list with an in-service date of earlier than 1980. He stated recent information did reveal there was a line item in the fixed assets that listed an in-service date of 1980. He further stated there was a lumping of several assets from the 1960's and this will be corrected in the report. He stated they came up with \$155 million for replacement costs, and when they make the adjustment, it will drop the costs to \$150-152 million. The fourth reason for terming this a preliminary assessment, as they noted in the report, is that when you look at value, the treatment plant, the dam and transmission main, is the differences in capacity. He stated they didn't make any adjustments for stranded capacity. Mr. Mastracchio stated the fifth reason is they didn't analyze the impact a purchase price might have on how the price of water would result. He stated the sixth reason is looking at ownership control premiums, minority control versus majority control. He further stated this is important to be looked at in the future phase of the work.

Dr. Casey asked what would you pay for ARWA and Mr. Mastracchio replied the answer to that depends on what perspective the buyer is going to be in. He stated when you look at different options of valuing the system personally he would weigh the replacement cost less depreciation value method rather than the original cost method or the comparable sales method. He stated from his experience in terms of water system sales that tends to be the number most relevant, so he would start there. Dr. Casey stated concerning the desire of your customers, who are very mindful of rates, and asked how much does that weigh in on the value of a product. Mr. Mastracchio replied it is not factored in, but he recognizes it is a consideration, and if you want rates to stay low presumably the acquisition price gets re-capitalized into the rate charged, then the acquisition price needs to be lowered. He stated if you are willing to pay more for the price of water in the future that can support a higher transaction price. Dr. Casey stated with these different valuation methods with some values on the higher end, if he were the new owner, is the expectation that he is recovering his investment through higher rates that otherwise exist, and asked if that was a fair statement and Mr. Mastracchio replied yes. Dr. Casey stated if they desire to maintain the same rates or stay at or below inflationary increase that warrants right away that you as a buyer are saying "I am only going to pay you this amount much less because I am not going to get that same return". Mr. Mastracchio replied that those were valid considerations and developing a rate model that can look at how much can rates be supported by certain levels of acquisition prices may be worthwhile to do. He stated from a pure valuation perspective you have these standard methods to come up with what the range of value can be. He further stated these other factors, i.e., do you want rate stabilization, do you want to go higher or lower. He stated, those factor into the price negotiation. Dr. Casey stated one of the things that impede this Authority from succeeding in the aggregate from all the ways we approach this entity, is you as a perspective buyer knowing you have a dysfunctional nature, we are trying to operate our own lines of businesses collectively. We have something that is running into some walls and he would assume that makes the value of an entity less than more. He stated if this was a perfect operation and all that we are handing over the keys to is, at most, a well-

oiled machine. It's different if you are picking up something that has an inherent stress to it, which lends itself into another factor adjustment down. Mr. Mastracchio replied it lends itself to consideration in terms of the value, where he put it into the control discount in terms of value in how you look at that. He stated if a new owner has complete control, that system will be operated and can maximize it for the benefit of the customer it serves. He further stated it's a benefit to that entity.

Mr. Ashcraft asked members if this is what they were looking for and Dr. Casey stated that we have never had a product like this before so going from nothing to something is a good exercise. He further stated that Chesterfield feels that the cost comparison between a dammed up whole in the ground like Cobb's Creek is not a good comparison for a run of the river reservoir that works off mother nature. He further stated he is focused on the value of ARWA, the value of what is the rate structure that is expected from this entity for which you, as a buyer, would have a price for it. He stated he wrestles with if you were nice enough to take the values of the total breaking it down to a per MGD cost. He thinks we have to be careful what the denominators of that are. He further stated he saw somewhere in the report that the permit is used for permitted ways we can operate this place and pull water out to have the waters be 32' below the spillway. He stated Chesterfield and Dinwiddie doesn't have an operating mindset for it to be 32' below the spillway, so to him what you think is a higher value to pull that much water is inherently restricted, therefore, the price has to change to what it's actually worth. He stated he thinks the denominator factor that is converting things to MGD may not be the proper denominator. He further stated he thinks it's a start of a conversation not the end whether it's through a firm who helps us determine what the end is or ourselves just working off ranges and adjustments. He stated that at some point in time we know the business of this place and what the nuances and pathways are as well as anyone. Mr. Ashcraft asked how long the numbers like this hold and Mr. Mastracchio replied they put a date on the analysis and the month to month changes in cost of materials won't have a huge impact on the value, but year to year does have some impacts because the system will be one year older and price inflation will occur. Mr. Ashcraft asked if every time the Authority does an improvement will it affect this and Mr. Mastracchio replied yes, as newer assets will affect the value.

Mr. Seth Garrison of Rafelis reported they work with a lot of utilities across the country using different models and depending on the jurisdiction; there are a lot of things that can work for them. He stated they talked with everyone on what their challenges were and honed it down to five key areas: 1) ability to transfer capacity shares among members; 2) different interests concerning system expansion; 3) different members drawing at different rates; 4) capacity limitations with the transmission system; and 5) financing changes and less regional cooperation. He further stated when they looked at alternative models these were the five major issues which was narrowed down to three alternatives. He stated the first alternative was focusing in on maintaining the fundamental Authority model, but looking at either revising the Service Agreement or revising changes in the voting structure which could be a way of voting or additional seats. He further stated the second alternative was looking at converting to a municipal model, where one of the members would take sole ownership of the Authority's assets and basically contract to the other members. He stated the third alternative was fairly new, and that was looking at the hybrid approach which involves keeping the fundamental structure of the treatment and supply assets but looking at potentially selling the transmission system assets which seems to be a focal point of a lot of issues recently. He stated an advantage of that approach is it doesn't fundamentally do anything to your supply shares but it does allow some flexibility in terms of how those supplies are distributed. It may address some of the issues of distribution in service capacity. He further stated beyond those three alternatives and that very few utilities have requirements that you have unanimous agreement in service requirements. These are usually set with a simple majority vote at the Board level. He stated the only thing he found unusual is a lack of specificity in the Service Agreement in terms of what pressure and how water is delivered, which created some stress for you. He further stated in some cases you will see where there is a certain number of MGD over a certain period. He stated basically the Authority's Service Agreement states you get the capacity over a twenty-four hour period. There aren't any allowances for peaks and valleys in usage. He stated others have requirements for minimum and maximum PSI. He further stated the big issue they came away with is there are a lot of restrictions by requiring a unilateral agreement on things that are difficult to move certain issues forward. Dr. Casey stated the price per MGD, while it was reflected in the prior presentation, how lateral is it if we are talking about how to smooth one MGD increment among ourselves and asked if that is the same bases of evaluation or are there factors to consider to raise or lower that price and Mr. Mastracchio asked if he were referring to shipping capacity among the members, and Dr. Casey replied correct as we all had our permitted share. Dr. Casey further stated it's all of our individual assets but in the future, we might want to switch an asset to someone else who wants that asset. He told Mr. Mastracchio that his valuation was on the whole of it, but the question is how is the micro equal to your whole, as he did the math for us, but he is not sure it's actually a fair assumption that it's a lateral discussion. Mr. Mastracchio replied he thinks the considerations in terms of valuation are still the same, but he thinks when you look at the possible sale of units of capacity between the members, that the other issues that can impact what is negotiated are different. He further stated we are talking about the rate impact which is not the rate impact in terms of the whole, because the new owner would be providing service to all the members and there would be a rate negotiated. He stated that consideration would completely go away if you're looking at share capacity among members. He further stated he thinks you can use the unitized cost of unit capacity for each component in the system, which in the report it is broken down at what's the cost per unit of sources, supply, treatment and transmission. He stated you can use those as comparable if you are willing to share capacity or willing to sell the whole. He further stated you can group them in different combinations in terms of what you are looking to negotiate. Mr. Garrison asked how he felt about the flexibility of values for each of the system assets, a transmission asset versus a supply asset. He thinks there is less variability in a transmission asset for example versus the supply asset. Mr. Mastracchio replied there are certainly preliminary aspects in looking at raw water supply and has a lot of other

considerations that make for valuing that asset much more challenging than a transmission pipeline. He further stated those things are tighter in terms of what the value range is.

Dr. Wichser stated that he agrees with Mr. Mastracchio disclaimer that the Board needs to be aware the replacement price of a concrete gravity dam that was valued at \$42 million and also the cost of water front property. Mr. Ashcraft referred to the table on advantages, disadvantages and considerations and Mr. Garrison stated those were somewhat subjective and they generally frame out the different perspectives. Mr. Ashcraft asked the Board if they wanted to take a month or two to show to their staff. Dr. Casey stated everyone probably would like to talk to their own staff, and everyone deserved the chance to say here are some questions if something is not clear. He further stated what he wants to know should someone pick this up to read it and understands what's being said or not said. He stated he thought Raftelis should solicit that from all of us. He further stated he has had this report for a while, but hasn't had a chance to do due diligence. He suggested that whatever our changes are, whether they are edits or summary, Raftelis could provide saying it's based upon other input. He stated after that he would say for everyone to read that final product and see what is actionable amongst us and what are other manners and ways in which we could work collectively or individually. He further stated that part of it is what are the five things and how can they be solved individually. Mr. Garrison stated one thing that could be helpful for them is to have the Authority or Davenport validate comments from everyone. Mr. Mastracchio added that they would need a time frame on when the comments would come in so they can produce the final version. Dr. Casey stated the date would be November 10, 2017. Mr. Ashcraft asked if Raftelis had any other work to do in this scope other than finishing this up. Dr. Wichser stated this was an unbudgeted project and the range given on this project was \$87,500 to \$175,000. He further stated Mr. Cole is getting ready to send another invoice and to date we will be at \$72,000 expended. Dr. Wichser stated the Authority spent quite a lot of time on this first draft. He further stated we provided extensive comments back to Mr. Mastracchio on this document and also provided extensive technical corrections/comments and also comments on facility replacement costs. Mr. Ashcraft stated one thing that concerned him was if he wanted one member of his Board to read this, it doesn't flow like a book and it doesn't allow you to know why this was even called for. He further stated it just jumps into the nuts and bolts. He asked if there was a call for a narrative or introduction. Mr. Garrison asked how we felt about putting the governing section in the front and the valuation towards the back. He stated the governing section tends to frame out some of the issues that the members have had and the valuation really explores the cost associates with that. Dr. Casey suggested an executive summary before both the governing and valuation areas. He further stated that as an official he would want to read the executive summary. He stated we wanted to get a qualitative and quantitative assessment. Mr. Ashcraft suggested that they work on two executive summaries for each section. Dr. Casey suggested in the executive summary to put one table of sales, cost or whatever the valuation methods were along with columns with summation. Mr. Ashcraft stated we wanted a better understandable document for anyone who wanted to read this, as members of the press may want to read it, and he would hate to see the Authority be misrepresented because someone couldn't understand the content. He further stated everyone will send questions/comments to Dr. Wichser by December 1, 2017, who will then forward them on to Mr. Cole. Dr. Casey suggested Dr. Wichser work through Mr. Ashcraft instead of getting a confusing exercise from five different directions.

Mr. Massengill stated in the process moving forward the County was approached by one jurisdiction wishing to purchase the Authority and unless Dinwiddie hits the lottery they won't be buying it. He stated since one jurisdiction has the ability to purchase, the fundamental question is who wants to sell. He further stated we had numbers from Chesterfield and the thought process was third party independent review which was accomplished. In addition to that, that's actually the governance and ownership piece of this. He stated this is being complete now and he sees the report needs to be accurate and there may be some things that Dinwiddie wishes to comment on. He further stated he would like to talk to his Staff and make sure the report we paid for is what it should be. He stated the question is, where do we go from here? He further stated he sees us going and not necessarily to an ARWA Committee, but doesn't see us going back to Chesterfield, who now that they have this type of information to submit some type of proposal. He stated at some point each of us has to go back to our governing bodies with the question of "do you want to sell". Mr. Massengill asked if there was any sketch of timeline or expectation of what that's to look like. He asked if this was a two-year process or something we are going to be asked to take to our governing bodies in three months? He further asked if we should have a discussion of that from meeting to meeting feeling ourselves through it. He stated he would like to know where we are going with this. Mr. Ashcraft stated that's a fair question and he would think that whether it be Chesterfield or whether it be any entity or private entity that wanted to read this Study and put together a proposal to purchase all or part of the system, that we would have to have an offer from the person wanting to buy it. He stated he didn't know how it compares with the thoughts of the original numbers that were out there and he thinks some of this validates it. He further stated if there is a proposal to come to the table that is when all the action starts.

Dr. Casey stated he thought each of the localities earns its respect for what is additional knowledge and perspectives as far as what we think it means, and you may think it means something different on ranges and things that were given. He stated what they did as part of an initial exercise was a fairly quick exercise and was basically a book value type and there was a methodology behind it. He further stated using the factors that they have presented, and everyone heard his comments, so you are seeing how he is trying to frame what is something worth on the free market and what does it mean to this area. He thinks at a minimum we could and should work toward what those four individual proposals worked off of before and the methodologies, and if there were changes to them now that we may have other knowledge and factors to consider. He stated it's a very fair exercise to say there's a whole exercise as one and there is individual exercise as well. He further stated sometimes it can be

completely separate and sometimes they can be layered together and how that changes the valuation is something we should all put our thinking caps on. He stated that's why he asked the questions is 1 MGD times 70 equal to a 70 MGD. He further stated we need to learn and form our own opinions. He stated that out of respect for all of us we are not here to rush something and he thinks everyone feels the same. He further stated he isn't here to say we need Phase 2 yet. He stated to let us digest this information and see what we can talk and think through, and as we come to our own conclusions, we can determine clearly whether or not we need a third party for Phase 2 or whether we get to Phase 2 on our own.

Mr. Ashcraft asked if we think we need to know from our governing bodies whether we would be willing to relinquish our share of the Authority if the right proposal came along. He stated the reason he says that is because there is no need for us to spend maybe all the time on the governance if we are not going to be governing. Mr. Massengill stated it had to be approved by every Board and Council and at some simple level it may be yes, if the right proposal came along to sell or we are not going to relinquish control, and we like the structure the way it is. He further stated we don't get to make that decision as the Boards and Councils do. Ms. Ferrell-Benavides stated she knew her Council would not want to discuss it. She further stated they are going into election season and anything with the word "water" is the hottest topic they have, and the firestorm of her residents is more than she really wants right now. She stated they may just quiet down and sell just the internal structure, so with her being in next year's election season and this discussion, she sees it becoming something that you would have to do a lot of marketing to educate, because even with what we were just discussing, which was a simple process, it was complicated, so she is not convinced that her Council would put it on the Agenda. Dr. Casey stated we are not coming out loud and announcing from the rooftops this is what we are going to pay for what we want. He stated we do this as a professional exercise amongst the Administrative officers to know what that standing perspective is, whether it's a year from now or five years from now or pieces and parts of it and that's how we are all going to work together. He further stated we all have to keep in the backs of our minds what elements of the governing side are constrained because of various elements. Mr. Ashcraft commented to Dr. Casey when the Committee did the due diligence they brought back a breakdown for each locality and what that would mean. Mr. Ashcraft asked Mr. Mastracchio if their report did that and Mr. Mastracchio replied it didn't and that they looked at individual localities and how a deal may be made between individual localities as a whole. Mr. Ashcraft stated that Chesterfield's was as a whole and the benefits from each locality were spelled out what that would be in terms of how much to purchase. Mr. Mastracchio stated they had included in the report the shares identified in the Agreement in terms of the usage of the system. He further stated if you utilized that to say what does the value mean for each locality, you can infer that, but they didn't directly address that. Mr. Ashcraft stated that if Ms. Ferrell-Benavides went to her Council about the benefit of us selling. He stated we have to have some kind of idea otherwise the fear of the unknown tells you to say no. Mr. Ashcraft stated that Mr. Hayes did a good job that day with Dr. Casey explaining all that to him and that they had it broken down where, if they were to take over the system that this is what it means for Prince George for ten years. He further stated this report didn't do that, and Mr. Hayes replied they didn't provide Raftelis any of the information they provided as they didn't want to sway them. Mr. Hayes stated Raftelis provided an evaluation of the Authority and Chesterfield's proposal took it two or three steps further. Chesterfield not only gave an evaluation of the Authority they created with their Finance staff in Chesterfield, so that you put in the evaluation and then you figure out where your rates may be going forward. He further stated they also looked at the Authority's ten-year CIP and put that on a rate model so they could do rates. He stated that Raftelis didn't do that and they didn't look at debts. Mr. Hayes stated they looked at the debt of each of the members and if they paid off that debt what it would take. He further stated theirs was the first step of multiple steps that Chesterfield would have taken.

Dr. Casey stated he had to leave for another appointment at 2:31 p.m. and Mr. Hayes took his place.

Mr. Ashcraft asked if Phase 2 is to do what we are talking about and Mr. Mastracchio stated their Phase 2 is to do some of the things talked about in terms of having an independent valuation. He further stated if you were to build a financial model that included an acquisition price and what would the impacts be that is part of Phase 2. Mr. Mastracchio told Mr. Ashcraft that one of the things that they could do in the Phase 1 report is to take that range and take the percentages that are in the Agreement and show that by community and break down the value, they can do that.

Mr. Massengill stated one reason he asked about a time line is because he doesn't want this exercise to somewhat hijack the ability to sell capacity with the bigger feeling or fault that there may be the purchase of the whole Authority. He further stated if it's a year plus coming back, does that mean that we're not going to fix the issue of being able to sell capacity during that same time frame. Mr. Massengill stated a lot of these issues are dovetailed nicely, but if what we are saying is in order to go through the process of making an informed decision, even getting a fundamental feeling of the Boards and Councils whether they wish to sell and to allow Chesterfield to be able to purchase, somehow really does limit the ability of a member jurisdiction to be able to sell capacity, he doesn't know if that timeline of twelve or twenty-four months is something that we as a Board of Directors should feel comfortable with. He further stated we had other subjects too like off-site storage and subjects not necessarily in the plant improvements. He stated he just didn't want this part of the project to hijack any other really important decisions the Board needs to make. Mr. Ashcraft said Mr. Massengill brings up a very relevant point that there were many votes that have been postponed waiting on this document so now what does that mean? He asked do we have to wait a year before we do the Amended Service Agreement as some of us have already approved the Amended Service Agreement and others have been waiting on this document. He asked; how does this document make you make it or break it?

Ms. Ferrell-Benavides stated that for Petersburg she knows the feedback she has received from the City on the ability to sell capacity would be the first priority and next, what would it be at what cost. She further stated that was the question they were trying to get to and once they get to at what cost, then they could move into that. She stated that as to the future of the Authority that is a very large, philosophical discussion that will take for her at least a year or two years before she has the credibility to have that discussion, but she does have that support that she needs internally and externally in her community for the capacity, if that's something that is needed and that can be shared with others. She further stated she doesn't want to lose sight of that focusing on the vision, but we have a few other things she thinks they can solve pretty quickly if they can figure it out.

Mr. Ashcraft stated as we send the comments on this to Raftelis, we can come to a decision as to how or if these items need to come back before the Board and the Amended Service Agreement that is still out there.

Mr. Massengill stated to amend the Service Agreement and for Dinwiddie one of the questions specifically was the concern of how much capacity is there to sell in Petersburg and what is the value of the asset. He asked if this was work that could be assigned in third party? He stated one concern of Dinwiddie was specifically two communities we have good working relationships with both Prince George and Chesterfield and trying to work out an arrangement with both people could win from this and as a result capacity could be sold. He stated if Petersburg had a third-party review of this to determine that, is that additional work that is required changing the scope or is there some other avenue that Petersburg needs to go forward with to get that number. Dr. Wichser asked if they were talking about the value per MGD and stated that we could not do that in-house. Mr. Cole stated elements of what Raftelis have done have stated a range of value for an MGD and different parties may not agree or there may be one methodology that is preferred over others. He thinks that is at least a starting point for valuing an MGD for the purposes of getting capacity, but it would also establish a basis for what the whole thing would be worth at that point. Mr. Ashcraft asked if we were going to set that number for localities or maybe it's the same for all localities or free market value if they wanted to put 10 million on one MGD they could do that, so what precludes that? He further stated there isn't anything there except the Amended Service Agreement's ability right now to be able to do that. He stated if the Amendment had gone through 5-0 and we were sitting here talking about the Amendment, then she could have sold it for whatever she wanted and Mr. Anderson replied correct. Mr. Ashcraft stated that to answer your question, would it be up to each of the localities to figure out what they think the value of their MGD is and Mr. Massengill stated as far as what they want to purchase it for. Mr. Massengill stated to Ms. Ferrell-Benavides that prior to her Mr. Tyrrell, not knowing the baseline to start, because they were using ranges from \$1 million to \$10 million per MGD and really didn't know what was a good honest starting point and for Petersburg they had to defend this back to the public because at the moment it is one, people are going to say it should have been seven, and the moment that it's seven then that's too high. He further stated they have a public perception issue of not being able to make decisions that are somehow backed up. He stated that was some of the concern of Petersburg as they needed somebody that could tell them that an academic approach in the range is truly from here to here. He further stated if you want to get into a bidding war and go to a premium amount it benefits Petersburg greatly. Mr. Massengill stated from when he was briefed when Mr. Tyrrell was here, they didn't have the concept of what the value of it was, not even a starting price and the range was significant.

Mr. Hayes stated the Raftelis report was trying to do that and if you look at the different cost of approaches they estimate between \$1 million and \$3.4 million per MGD in the report based on different analysis. He further stated they have some comments from Chesterfield they would like to give on some of the items in the report. He stated one concern he would have and he believes each member would have to determine what additional capacity they have on their own. He further stated he wouldn't want a consultant from ARWA determining what each member should sell. He stated he thinks each jurisdiction would have to determine that on their own. He further stated that Raftelis did just that, they tried to put a valuation and used different valuation methodologies to come up with a range. Mr. Mastracchio stated that one of the things that you might want to consider in terms of unit capacity between entities is what is that capacity from a treatment perspective and that's going to be different than a transmission capacity so whether you proportion it or whether it's a fixed MGD of treatment correspond to a fixed MGD of transmission. He stated there are nuances there that you want to work through so what does that mean. He further stated once you know that, then you can hone in on a price because there are lots of things like that that should be considered.

Mr. Ashcraft asked if there was anybody else in the meeting that was a customer of Petersburg and the reason he asked is because that number was reached through their rate structure. He stated this wasn't reached by ARWA or SCWWA and it was through their rate structure. Mr. Massengill asked if he was talking about the transmission agreement and Mr. Ashcraft answered correct because their governing bodies set rates and as customers we pay it and it has nothing to do with the Authorities and was told he was correct. Mr. Ashcraft stated he didn't know if the MGD's the same concept or not. Mr. Hayes asked Mr. Ashcraft if his question was, could Petersburg be a wholesale supplier and Mr. Ashcraft replied no that he was trying to find out how much money they could get out of one MGD as he doesn't think it's this Authority's scope to set that for any of us. He further stated if we were ever able to sell it and buy it are we going to set the cap. He stated the Amended Service Agreement states you can only buy so much and we did establish that. Mr. Anderson stated that the Amended Service Agreement doesn't say anything about buying as it's completely silent about that. Mr. Massengill stated he doesn't know if it has to be uniform and he doesn't know if you have to set a cap, he is simply saying when Dinwiddie was briefed by Petersburg, prior to Ms. Ferrell-Benavides coming, they wanted to know what a good fair market rate is and what a good starting point is. He further stated they felt if they didn't have a good starting point even if there was a deal made and it was sold, they wanted to be able to represent to the citizens of

Petersburg that they weren't being taken for granted. Mr. Massengill stated that obviously he thinks if you go higher than you choose to except different prices from different localities, but what was the average price is what the hurdle was for Petersburg.

Mr. Mastracchio asked about the question referring to the transfer of capacity share and stated one consideration would be whether the seller of that capacity would have to transact with ARWA, and then ARWA transacts with the buyer, or would it go from seller to buyer directly. He stated he thought the Agreement would have ARWA in the middle, and that may lean you towards having more of a uniform price because it's ARWA kind of orchestrating the actions between entities. He further stated he didn't know how the amendment was written, but that would be one consideration in terms of who has the ability to sell capacity would be a factor in terms of transacting first ARWA and then to the opposite party. Mr. Ashcraft stated that still didn't decide how much we have to sell or what we own and Mr. Mastracchio agreed. Mr. Ashcraft stated this could be put back on future Agendas to try to narrow it down to where we can figure out how to get an answer to it.

Mr. Massengill stated another reason Dinwiddie didn't vote on the Amended Service Agreement was that they knew Chesterfield wanted to make modifications and offer some friendly Amendments of which he doesn't think has been done yet. He stated they wanted to review those instead of taking them to the Board, have them approved inevitably knowing they wouldn't be approved by Chesterfield. He further stated his Chairman felt that wasn't necessary. Mr. Massengill stated if this is still an action item or an item that needs to be addressed, he would like to request Chesterfield make the modifications and send them to the members so we have something to work off of. He further stated if Chesterfield submits it and everybody agrees to it, we can take it back to our Councils and Boards and get it approved. Mr. Hayes stated at this point anyone could make a motion to make a change to the Amended Service Agreement and Mr. Massengill agreed. He stated that Chesterfield indicated they had some issues and some good recommendations and they are waiting to see those recommendations. He further stated he could take it back to the Board and it would be 4-1 for an extension but we would still have to go back again. Mr. Hayes stated one issue was that the Amendment wasn't clear with the limitations on the Amendment as there were two different terms interpreted two different ways. He further stated there were other issues we've talked about for years about pump stations, etc. Mr. Ashcraft suggested Mr. Hayes talk with Dr. Casey and see if the information received from the report will cause them to move forward any quicker with anything to do with the Amended Service Agreement, and if it doesn't, just let everyone know so that we can do something different as right now, it is kind of sitting out there. He further stated, we still have this Amendment to the existing Service Agreement, three jurisdictions have approved and two have not, pending a lot of circumstances. He stated if we are not going to move on that and do something different, then we have to start addressing it.

4. Dam Raise Committee (Casey & Massengill): Discussion as needed

This item to be updated at next regular Board meeting.

5. SCWWA "True-Up" Committee (Smith & Ashcraft): Discussion as needed

Mr. Smith reported on the hand-out he gave to members. He stated the chart has three options following up from the discussion that we had previously about what to do with the additional leachate revenue and the possibility of setting up a capital reserve. He further stated it would be a new opportunity for us here with future needs that would be coming down the road that staff has brought to our attention. He reported this chart shows the original option of each locality under Option #1 with them getting a share back from the overage that has been paid in for Operations and Maintenance and the full \$1.9 million additional leachate revenue potentially going to that capital fund. He stated Option #2 is very similar and would be at Petersburg's option, if they wanted to apply some of that funds that they would have received to offset past monies due. He further stated that Option #3 is another one for discussion and consideration in which the total amount going to the potential capital improvement reserve would be reduced and part of that funding could help Petersburg with offsetting their previous amounts due and that same percentage for Petersburg's amount of the total \$1.9 million being applied to each locality, so each locality received some additional funding and that is about a \$400,000 difference from where the original \$1.9 million would have been. He stated he had the opportunity to have a conversation with Mr. Anderson about the Service Agreement and about us moving forward with this without doing an Amendment. Mr. Anderson stated it was just a follow up to the conversation we had at the previous meeting and the Agreement right now, unlike the situation with ARWA where we do have creditors/lenders that would oversee what we do with the Service Agreement. He stated his advice has been this could be done on a Board level at SCWWA, and if there is a need down the road to make an Amendment, we are going to be facing Amendments for any future capital project. He further stated that we just add this to the list and bring it up then. He stated this leachate was never contemplated in the original Agreement. Mr. Smith stated obviously that doesn't mean if somebody raised a concern or challenged us that we would necessarily win that regard, but the Agreement is not as ambiguous regarding this particular topic and Mr. Anderson agreed. Mr. Smith suggested that we pursue one of the first two options, but also suggested that we go ahead and set this fund up without doing the Service Agreement Amendment and that we look at it on an annual basis at this time of the year we are getting the numbers back so that we can evaluate. He stated it might be a year to year thing that we determine how much of the surplus funds go in which direction. Dr. Wichser stated the Authority recommends Option #2, and this would be favorable to the City of Petersburg that will bring them up-to-date on their arrears. He further stated everyone gets a little payment back. Dr. Wichser stated that SCWWA doesn't presently have any funds or reserves for capital improvements. He further stated that there is one capital project that we estimated that is going to come in at \$5.5 million to \$6 million, and that is upgrading the Solids Building equipment. He stated if

we take this excess money and set up a capital improvement reserve now, we should be able to fund that project through design and construction with this cash. He further stated; we then phase the nutrient upgrade project that we expect in the 2022 to 2024 era, and we won't be facing potentially a \$50 to \$70 million project. We might be facing a \$35 to \$40 million project instead. He stated we are going after what we can get at the plant using cash. He further stated his goal was to get this capital improvement reserve fund set up. He stated he can't guarantee leachate forever, so we are taking advantage right now while we have it.

Mr. Ashcraft asked if this was time sensitive and Dr. Wichser replied yes due to the need to complete the annual financial audit numbers.

Upon a motion made by Mr. Smith and seconded by Ms. Ferrell-Benavides the following resolution was adopted:

RESOLVED, that the Board proceed with Option #2 as outlined in the Staff Table which will result in funds going to or due from the localities as shown on the attachment with the miscellaneous revenues in the amount of \$1.9 plus million going into a newly established capital improvement reserve from the leachate revenues:

For: 5 Against: 0 Abstain: 0

6. Other Items from Committee Members Not on Agenda

Ms. Ferrell-Benavides introduced March Altman as the new Deputy City Manager for Operations of Petersburg.

7. Adjourn

Upon a motion made by Mr. Massengill and seconded by Mr. Smith the meeting was adjourned at 3:00 p.m.

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

MINUTES APPROVED BY:

Kevin Massengill
ARWA Secretary/Treasurer

George Hayes
SCWWA Secretary/Treasurer

BOARD OF DIRECTORS MEETING

Appomattox River Water Authority

November 16, 2017 at 2:00 p.m.

Location: South Central Wastewater Authority

900 Magazine Road, Petersburg, Virginia

PRESENT:

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

ABSENT:

Aretha Ferrell-Benavides, (Petersburg)
William Henley, (Alternate, Colonial Heights)
William Dupler, (Alternate, Chesterfield)

STAFF:

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

OTHERS:

Ted Cole, (Davenport & Company, LLC)
Matt McLearen, (Robinson, Farmer, Cox Associates)
Denny Morris, (Crater PDC)
Stephen Crowe, (AECOM)
March Altman, (Petersburg)

Mr. Ashcraft, Chairman, called the meeting to order at 2:07 p.m.

7. Call to Order/Roll Call.

The roll was called.

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

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

RESOLVED, that the minutes of the Regular Meeting of the Board on September 21, 2017 are hereby approved:

For: 4 Against: 0 Abstain: 0

Dr. Casey arrived at 2:09 p.m.

3. Public Comment

There were no public comments.

Mr. Ashcraft introduced Denny Morris, Director of the Crater Planning District.

4. Executive Director's Report

• Reservoir Status Update for September/October 2017

Dr. Wichser reported on the Reservoir Status Update for September/October 2017. He stated that as of today the reservoir is down one inch. Dr. Wichser further stated that what is predicted by the NOAA model for October 19, 2017 through end of January 2018 is that precipitation will equally be: above normal, at normal levels or below normal levels. He stated the reservoir water quality has been excellent.

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

Dr. Wichser introduced Matthew McLearen of Robinson, Farmer & Cox Associates who provided a presentation on ARWA's Annual Financial Accounting Audit. Mr. McLearen stated ARWA received a clean compliance report from VRS, which has been submitted to the Auditor of Public Accountants. Mr. Smith asked if Mr. McLearen could explain the increase under Current Assets from 2016 to 2017 for the cash and cash equivalents where it went up about \$2 million, and Mr. McLearen explained a large portion of that could be found under Increase in Cash, which went up \$886,000. He further explained that a lot of this is because Net Position went up,

which is the Revenues over Expenses, increased \$416,000 and that's after depreciation of \$2.5 million. He stated if you take that non-cash number out you have a pretty good size operating income.

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

RESOLVED, that the financial statements are hereby approved as presented:

For: 5 Against: 0 Abstain: 0

- **Davenport Report on "In-Plant" Project Bank Proposals**

Dr. Wichser introduced Ted Cole of Davenport who presented a report on "In-Plant" Project Bank Proposals. Mr. Cole discussed the RFP for financing the "In-Plant" Project which they have now received back from three banks. He further stated they had received updated information from VRA. Mr. Cole stated the "In-Plant" bids would go out in January and Dr. Wichser stated the way its set up presently is they will be finished with design by December 23, 2017, but with the holidays coming up bidding would be after the first of the year. The construction contractor bid period would close around the first or second week of February, where we would then review the bids during the next month and hopefully bring our recommendation for award to the March 2018 Board meeting. Mr. Cole stated that you wouldn't know definitely the cost of this project, but working off of the engineer's estimates, we are presently using the ninety percent design estimate. He further stated there is a contingency line item in the engineer's estimate. Dr. Wichser stated there is a thirty-five percent markup for construction and five percent for contingency. Mr. Cole stated you have some options with this project. He further stated the first option is a Direct Bank loan, which they have three proposals to present, or through VRA who has put three options on the table. He further stated the second option is to participate in the VRA spring pool. Mr. Cole stated the third option is to participate in Virginia Helps Program.

Dr. Casey stated that he and Ms. Ferrell-Benavides did a minor report on their meeting with VRA. He further stated that while VRA is thinking and trying to offer things, it does seem whatever this transaction will be, we would almost have a twenty-year or fifteen-year disclosure. He stated that it's something about that or about our own books disclosing something, if we had moral obligations for ourselves. He doesn't like extra words in his audit report that he didn't need to have. Dr. Casey stated he had no idea what accounting standards may be in the future. We might have to disclose moral obligations as additional liability or risk. He stated he is disappointed with VRA. He further stated that the banking community appears to step up and he wasn't sure as he thought they didn't like to go twenty years. He asked Mr. Cole if there were any additional hoops or loops with the twenty-year bank transactions, and Mr. Cole stated no that whatever their strategy was they were showing up regularly. Dr. Casey stated he was not in favor of over issuance, and if he did, he would like to take those proceeds and pay off the debt.

Mr. Smith asked if Staff had information on the rate implications and Dr. Wichser stated we ran a quick analysis at \$14 million and what impact it would be on the 2018-19 proposed budget. He passed out information on what the rate/financial impacts were. He further stated as Mr. Cole mentioned we had \$99,000 expected debt service in this budget year, and we presently have about \$1.53 million in reserves. Dr. Casey stated this was at the over issuance amount and asked if we could do one with the project, and Dr. Wichser replied yes. Mr. Smith asked if this was based off the fifteen-year term and Dr. Wichser replied yes. Mr. Gordon stated it was with US Bank proposal at a fifteen-year term. Mr. Cole stated it would end up being \$13.25M, because that's a more refined contribution for the reserve fund. Dr. Casey stated while VRA may be the better rates, sometimes by a fraction, he thinks it works out to \$25,000 to \$30,000 in terms of debt service for the year and we could all do our math. He would rather not have a worried disclosure even if it cost him that \$20,000 a year more in debt service. He further stated we don't even know what the risk factors are, as that \$20,000 could go away if the basis points went up by twenty basis points and asked Mr. Cole if that was a fair statement and Mr. Cole replied yes.

Mr. Massengill asked Dr. Wichser if we were to keep it to the project costs, but in the event, it did come in higher, who would make up that difference, and Dr. Wichser replied last Thursday we received the engineer's ninety percent design costs on the project and it was about \$2 million over budget. He stated he worked over the weekend and discussed with the engineer, telling them it was presently an unacceptable project cost and we wanted to apply additional value engineering. He stated we were able to drop off the cost difference and return the total project cost estimate back into the range we were initially told to expect by the Engineer. He further stated we made material changes dropping some equipment, but the project is still viable with the present equipment design. He stated on a project this size there is not a lot of room to value engineering. He further stated what we do know is if we pre-order, we can save considerable costs, which our engineers stated is close to half million dollars. We expect that we can purchase the Generator that we need thru a consortium that will be under anybody else's cost. He stated we are going to use cash towards the engineering contract expense, which will be paid off by June 30, 2018. Mr. Cole stated the numbers in here for the project reflect the \$500,000 of the

pre-order discount. Mr. Massengill asked what the life span of the overall improvements themselves are, and Dr. Wichser replied minimum twenty-five to thirty years.

Mr. Smith asked Dr. Wichser to explain about the pieces being replaced and current age and problems with the equipment. Dr. Wichser explained that Raw Water Pump Station No. 1 was built in 1967 and a few of the motors and pumps have been rebuilt, however we are designing this pump station for installation of energy efficient motors. He stated the electrical conduits would be replaced in new duct banks. He further stated we have designed a new motor control center building for Pump Station No. 1. We expect there will be electrical savings of up to a minimum of thirty percent. He stated chemicals, electricity and propane are the big items in the plant. He further stated another thing about the motors for Raw No. 1 and Finished No. 1 is we are going to more efficient variable frequency drives. He stated the existing emergency generator was installed in 1985 and rebuilt once. He further stated presently without that generator we cannot send out water except by gravity at about 35 MGD. He stated we want to put a larger generator in that will allow us to produce and send out 70 MGD of finished water during times that Dominion's electrical feed is not operating. Mr. Smith asked Dr. Wichser if both the pump stations he referred to are around that time period and Dr. Wichser stated yes, both were of the 1966 era.

Mr. Massengill stated to Dr. Wichser that it was indicated; if we went to the \$14 million and the bid actually came in on target or better and it freed up additional funds, what is the next priority project that those funds would be applied towards. Dr. Wichser stated that at the Board's leisure they might consider one project in next year's budget that tails off of this project in the ARWA Capital Program. That project is the pump station ground tank that's been value engineered to \$3.5 million dollars and this smaller project is currently in the 2019-2020 Budget. He stated if excess funds come in they could be applied to that project if the Board desired. Dr. Casey stated the only thing that is awkward about that is Chesterfield is paying 65% of that and that's using your math. He further stated we didn't need to get into that and wants to go one day without talking about it. Dr. Wichser stated we do have other items in the plant that could be addressed, for example 1967 era sedimentation basin gates that are need to be replaced in the older part of the plant, which we estimate would cost about \$250,000 to replace. Mr. Massengill stated he was trying to see where staff would be recommending those funds be spent. Dr. Casey stated for some reason he thought the way they do the resolutions for the projects, when he builds a school he issues school bonds he doesn't go off and build a fire station with the excess proceeds. He stated he thought these were the in-plant reliability rehab projects as far as the resolution reads, so to even bring up that topic and Dr. Wichser stated the gates were in-plant, and Dr. Casey asked as a rehab project and Dr. Wichser replied yes. Dr. Casey stated he was asking Mr. Anderson and Mr. Anderson asked which project are we talking about. Dr. Wichser stated for instance if the bid came in low and we saved half million dollars could we apply that to other older parts in the plant and Mr. Anderson answered they would have to be improvement projects that would have to be identified as such by engineers, who has identified these in-plant projects right now as improvement projects under the Service Agreement. Mr. Anderson further stated those get shared and it's basically what you are paying now. Mr. Anderson stated he didn't know what the engineer is recommending on Branders, whether it's an improvement project or expansion project. He stated if you had it in your mind and thinking about it, but not disclosing it until it was prompted, how we allocate and how we have been talking in trying to figure out shares for something that was outside of our consumption, and Dr. Wichser stated he understood and that inside the plant there are numerous maintenance items such as gates and pumps that could be replaced, and the money could be used that way. Mr. Cole stated that excess borrowing monies could be used for interest payments and Mr. Anderson replied or you could curtail the principle. Mr. Cole stated on that point he would like to point out that each of these banks have different prepayment language, so it's not if you have an extra \$250,000 that you just pay down the loan and re-amortize it. He further stated they may let you, but US Bank said you can't do anything for the first thirteen months, and Sterling the first five years is non-callable so there is some limitation to just paying down the loan quickly.

Mr. Anderson stated he sent all Board members a draft of the resolution to authorize for financing once the bank bids came in. He further stated he left blanks in the draft, so if the Board decided to move forward with this, he could fill in the blanks. Mr. Ashcraft asked about the amount and Mr. Anderson stated he was referring to the \$13.5 million for the "In-Plant" project. Dr. Casey asked the cash that we are using for the engineering, \$940,000, is that being reimbursed by this issuance and Dr. Wichser stated it is not. Dr. Casey stated his point is, if we over issue, let's do the accounting right and reimburse ourselves for the engineering costs related to the project up to the \$940,000 and use reserves for another day. Mr. Anderson asked Mr. Cole if we were ready to select a bank. Mr. Cole stated many of these banks, they go through a pre-screen with their credit folks. He doesn't expect any issues with any of the banks. He stated the one thing he would put out there is, if you go with the fifteen-year financing with US Bank, he would ask that we give consideration if something happens in the final approval process, whether it would be appropriate for Davenport to move forward with the next best bid which is Sterling.

Mr. Ashcraft asked if there was any interest to pursue VRA and everyone replied no. Mr. Smith asked what this was based on as far as the bank proceeds and was told \$15 million. Mr. Ashcraft asked any thoughts on the term

of fifteen to twenty years and Mr. Cole stated only a term of fifteen years was offered by US Bank. Mr. Byerly stated this is a decision he would be more comfortable with if Ms. Ferrell-Benavides was here to make. Dr. Casey asked Mr. Anderson if this required a 5-0 vote and Mr. Anderson replied no, just the majority of a quorum.

The meeting was recessed at 3:18 until 3:40 p.m. in order that Mr. Byerly get in touch with Ms. Ferrell-Benavides

Mr. Ashcraft called the meeting back to order at 3:40 p.m. He suggested that this Board meeting recess and allow the SCWWA Board meeting to convene to take care of their business due to the legal counsel having to prepare some paperwork in anticipation of any action this Board may take on this matter. He stated we would return back to the ARWA Board meeting for the final action. The meeting was recessed at 3:41 p.m.

Mr. Ashcraft called the meeting back to order at 4:04 p.m. regarding financing. He stated Mr. Cole and counsel had put the appropriate paperwork together. He further stated in the event US Bank, and the terms we could see them giving us fell through, do we want to give consideration to Mr. Cole, Dr. Wichser and others to go to the next qualified bank which would be Sterling Bank. Mr. Cole stated he didn't expect any issues with US Bank, but because the Board doesn't meet again until January, he would hate for us to come to an impasse and not be able to move to the next bank bid. Mr. Anderson stated he had filled in the blanks on the resolution for US Bank with the principal amount of \$13.5 million and put in a provision, in consultation with Mr. Cole, that Sterling Bank is the second low bidder and we are authorized to proceed with Sterling Bank. Dr. Casey suggested an orientation as to when both Authorities need to get their respective Boards to approve debt versus us having the ability to act on our localities passed by this Authority. Mr. Anderson stated that the answer is that the Service Agreement for this entity allows it to borrow on a majority vote of the Board. He further stated that the SCWWA Service Agreement does require that all of the governing bodies consent. Mr. Cole stated that so long as the terms and conditions of the borrowing for ARWA are not special or unique. Dr. Casey asked if there was a difference in capacity based projects versus maintenance rehab projects as far as the voting and was told no.

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

RESOLVED, that the resolution as modified by legal counsel and described to members be adopted:

For: 5 Against: 0 Abstain: 0

- **Status Report: Ongoing Projects/Operational/Financial**

Mr. Gordon reported on the Status Report of Ongoing Projects/Operational/and Financial.

- **Proposed 2018 Board Meeting Dates**

Dr. Wichser presented the 2018 Board meeting dates. The meeting scheduled for June 21, 2018 was re-scheduled to June 14, 2018.

5. Subcommittee Reports

Mr. Massengill gave an update on the raising of the dam. He stated they held a meeting in Chesterfield on November 3, 2017 with Dr. Casey, Mr. Hayes, Dr. Wichser, Mr. Gordon and himself attending. They had a conversation on the background leading up to the ultimate decision of how to move forward with raising the dam or not. He stated they all recognized how important this was to the Commonwealth making these funds available through the grant process. He further stated the committee felt like recognizing some of the regulatory, financial, and some of the policy issues that are handcuffing us at this point in time. Mr. Massengill stated that recognizing that any one jurisdiction could do this by itself; they don't see any of the five jurisdictions individually doing this project. He further stated they put more of their efforts towards looking at the five-million-dollar grant to see if there was any other aspect of the project that could potentially be used. He stated that the idea was moving the five million dollar grant out of DEQ and specifically looking at the two bridges, both of which are located in Dinwiddie that offer free passage into the coves to the main lake. He further stated they felt that at some point in time that raising the dam is a very viable option, but based on where we are today that's just not the case. Mr. Massengill stated that the five million dollars request for transfer should go back to Kirk Cox and see if there is a possibility of taking it from DEQ and maybe putting it towards VDOT and seeing if those funds could be used to do one or two of the bridges. He further stated that once complete, those projects would be beneficial to raising the dam at a future point.

Dr. Casey stated one of the aspects are, if the project itself can differentiate aspects of it, things we can do that may not involve costs such as a review of the standards for docks and boathouses, so going forward that any new docks or boathouses built may be built with the assumption that the dam is being raised. He further stated if there are

opportunities amongst our region for wetlands mitigation, if we're doing something as a locality going through an effort to mitigate wetlands and there is an opportunity to accumulate a land bank, then bring those discussions forward. He stated we had to be forthcoming back to ARWA as well with what that total is. He further stated just making the hydro electrical facility know that what they have right now is an impediment not by their own choosing but the Federal Energy Regulatory Commission's impediment. He stated to write a letter to the FERC and make them realize sometimes their regulatory natures and prosthesis and costs encumber projects with the fact, if this is a long-term project that may be needed at some point in time come 2026. He stated if that's the notification date for the current lease, that we get a decision before 2026 to see if it's worth having a \$30,000-\$55,000 lease for something that's an impediment right now. He stated that Dinwiddie and Chesterfield Counties need to use their collective wisdom of how to relay these messages back to their elected officials who live closer to the river and the residents. He further stated that every year that goes by since the 2010 drought, whatever is imbedded in people's minds is one year less that stresses their anxiety. He stated VDOT is not just a matter of rebuilding the bridges that can cost "X", it's rebuilding at a higher elevation. He further stated we needed to know what that cost is and it may be more than what a straight rebuild is.

Mr. Smith asked for a little background on the bridges and Mr. Massengill stated the current bridges allow for free-flowing movement underneath one marina on the lake. Mr. Massengill further stated this is the only gas station at Lake Chesdin that serves both Chesterfield and Dinwiddie residents. He stated the concern came about when there was a discussion about raising the dam, that the new elevated pool would push that level so far up that it would harm folks and be a traffic issue. Dr. Casey stated that even now pontoon boats have to take their tops down. Mr. Massengill stated that at some point the bridges have to be replaced. We have a bridge safety and design group at VDOT that evaluates all the bridges in Virginia on a replacement cycle. He stated the point they are trying to make is that once these bridges are to be identified to be rehabbed and the recognition that the Authority feels like that a dam raise is going to be important, at some point in time we keep that communication with VDOT. He further stated it's not simply replacing what is there as it will take the coordination of the Authority and the State to ensure that doesn't happen. Dr. Casey stated that Chesterfield had the assignment by December 1st to leave comments on the Davenport/Raftelis Study. He further stated that some of those responses they have may also illustrate how this project may need to be managed and paid for in the future, as well as some other projects that are a continuant discussion. Mr. Massengill stated it was good seeing Denny Morris here today, and part of the conversation with the regional PDC was they would like to continue to keep Mr. Morris and those elected officials more aware of projects such as these, and talk about strategic planning for the region and the role of the PDC to help us through that as something as important as our water and sewer asset to have more of a review by Mr. Morris and the PDC. Dr. Wichser stated in reference to the bridges we need to remember that the reservoir is considered waters of the United States, and as part of the committee on raising the dam, one of the federal agencies that would be involved is the United States Coast Guard. He further stated that the reason for that is the boating on the reservoir, and they have to ensure that navigation is not blocked. If we determined navigation would be blocked, the Coast Guard would rule that the bridges must be raised as part of the dam raise permitting process.

6. Items from Counsel

There were no items from Counsel.

7. Closed Session

There was no Closed Session.

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

Mr. Smith asked if once the whole financing deal was done if Staff could get an updated chart sent out to everyone.

9. Adjourn

Upon a motion made by Mr. Massengill and seconded by Dr. Casey the meeting was adjourned at 4:26 p.m.

The next regularly scheduled Board meeting is Thursday, January 18, 2018 at 2:00 p.m. at the Appomattox River Water Authority.

MINUTES APPROVED BY:

Kevin Massengill, Secretary/Treasurer

3. Public Comment

The Guidelines for Public Comment are:

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

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

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

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

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

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

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

4. Executive Director's Report:

- **Reservoir Status Update for November/December 2017**

- **Presentation by Steven Nebiker- HydroLogics: 2017 Reservoir Modeling Results Compared to 2013 Modeling Results**

Steven Nebiker of Hydrologics will present the 2017 Reservoir Modeling Results as compared to the 2013 Model.

- **Approval of Contractor Prequalification Process**

Following is a memo and policy regarding an ARWA and SCWWA Contractor Prequalification Process.

MEMORANDUM

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

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

SUBJECT: PREQUALIFICATION PROCESS

DATE: JANUARY 18, 2018

In the best interest of either Authority, staff has provided for Board review and approval a contractor Prequalification Process conforming to the requirements of Code of Virginia Section 2.2-4317.

The proposed Prequalification Process has been reviewed and approved by McGuire Woods and once Board approved, will be implemented today. The upcoming Appomattox River Water Authority's "In-Plant" project will utilize the prequalification of contractors. Any future capital projects at the Appomattox River Water Authority or South Central Wastewater Facility will be reviewed for the need to prequalify contractors based on the objectives of the Authorities.

BOARD ACTION REQUESTED:

Staff requests that the Board of Directors approve adoption of the contractor Prequalification Process, and that the Executive Director be authorized to implement this process in the best interest of either Authority.

**APPOMATTOX RIVER WATER AUTHORITY (ARWA)
SOUTH CENTRAL WASTEWATER AUTHORITY (SCWWA)
PREQUALIFICATION PROCESS**

January 18, 2018

Pursuant to Code of Virginia §2.2-4317, the Appomattox River Water Authority and the South Central Wastewater Authority (each an “Authority” and together the “Authorities”) adopt the following as their prequalification process to prequalify prospective contractors to bid on selected projects:

1. The Executive Director or his designee may, in his discretion, when he believes it to be in the best interests of either Authority, require prequalification of prospective contractors to bid on a specific project for such Authority. The purpose of such prequalification shall be to limit prospective bidders for such project to contractors who show themselves to be qualified to perform the project. When the prequalification process is used for a project, only contractors who have complied with the prequalification process and have been determined qualified will be eligible to submit bids for the project.
2. The Executive Director or his designee shall develop the appropriate documentation for potential contractors to apply for prequalification. The Executive Director or his designee may prescribe in such documentation specific mandatory requirements contractors must meet in order to prequalify for specific projects.
3. In conducting prequalification of potential contractors, the Executive Director or his designee shall follow this prequalification process and the requirements of Code of Virginia §2.2-4317.
4. The documentation used in the prequalification process shall set forth the criteria upon which the qualifications of prospective contractors will be evaluated. The documentation shall request of prospective contractors only such information as is appropriate for an objective evaluation of all prospective contractors pursuant to such criteria. The documentation shall allow the prospective contractor seeking prequalification to request, by checking the appropriate box, that all information voluntarily submitted by the contractor as part of its prequalification application shall be considered a trade secret or proprietary information subject to the provisions of subsection F of Code of Virginia §2.2-4342.
5. In all instances in which an Authority requires prequalification of potential contractors for projects, advance notice shall be given of the deadline for the submission of prequalification applications. The deadline for submissions shall be sufficiently in advance of the date set for the submission of bids or proposals for such project so as to allow the prequalification process to be accomplished.
6. At least thirty (30) days prior to the date established for submission of bids or proposals under the procurement for which the prequalification applies, the Authority conducting the prequalification shall advise in writing each contractor who submitted an application whether that contractor has been prequalified. In the event that a contractor is denied prequalification, the written notification to the contractor shall state the reasons for the denial of prequalification and the factual basis of such reasons.

7. A decision by the Executive Director or his designee under this prequalification process shall be final and conclusive unless the contractor appeals the decision as provided in Code of Virginia §2.2-4357.
8. An Authority may deny prequalification to any contractor only if such Authority finds one of the following:
 - a. The contractor does not have sufficient financial ability to perform the contract that would result from such procurement. If a bond is required to ensure performance of a contract, evidence that the contractor can acquire a surety bond from a corporation included on the United States Treasury list of acceptable surety corporations in the amount and type required by the public body shall be sufficient to establish the financial ability of the contractor to perform the contract resulting from such procurement;
 - b. The contractor does not have appropriate experience to perform the project in question;
 - c. The contractor or any officer, director or owner thereof has had judgments entered against him within the past ten (10) years for the breach of contracts for governmental or nongovernmental projects, including, but not limited to, design-build or construction management;
 - d. The contractor has been in substantial noncompliance with the terms and conditions of prior contracts with a public body without good cause. If the Authority has not contracted with a particular contractor in any prior contracts, the Authority may deny prequalification if the contractor has been in substantial noncompliance with the terms and conditions of comparable contracts with another public body without good cause. The Authority may not utilize this provision to deny prequalification unless the facts underlying such substantial noncompliance were documented in writing in the prior project file and such information relating thereto given to the contractor at that time, with the opportunity to respond;
 - e. The contractor or any officer, director, owner, project manager, procurement manager or chief financial official thereof has been convicted within the past ten years of a crime related to governmental or nongovernmental contracting, including but not limited to, a violation of (i) Article 6 of the Virginia Public Procurement Act (§ 2.2-4367, et seq.), (ii) the Virginia Governmental Frauds Act (§ 18.2-498.1 et seq.), (iii) Chapter 4.2 (§ 59.1-68.6 et seq.) of Title 59.1 or (iv) any substantially similar law of the United States or another state;
 - f. The contractor or any officer, director or owner thereof is currently debarred pursuant to an established debarment procedure from bidding or contracting by any public body, agency of another state or agency of the federal government; and
 - g. The contractor failed to provide to the Authority in a timely manner any information requested by the Authority relevant to subdivisions a through f of this Paragraph 8.
9. In determining if a contractor has the “appropriate experience” under Paragraph 8.b. to be prequalified, an Authority may consider and use specific minimum experience requirements established by the Executive Director or his designee for the specific project. Such Authority may also consider the contractor’s past performance on the projects that provide its past experience to determine if the projects provide the appropriate experience required.

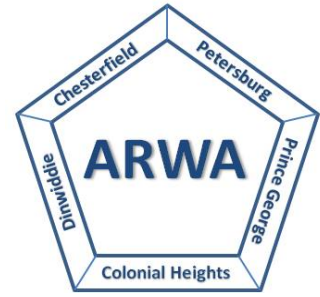
10. To the extent any provision in this process is deemed to be inconsistent with Code of Virginia §2.2-4317, whether due to amendment of that statutory provision or otherwise, then the provisions of §2.2-4317 shall control as to such inconsistency.
11. The provisions of this process and its implementation are intended to be severable, and if any provision is deemed invalid, this shall not be deemed to affect the validity of other provisions.
12. This prequalification process does not apply to any procurement done under the Public-Private Education Facilities & Infrastructure Act of 2002 (the “PPEA”), Code of Virginia §56-575.1 et seq., and is in no way intended to limit an Authority’s discretion in the way it selects contractors under the PPEA.
13. A determination that a contractor is prequalified does not necessarily preclude an Authority from determining that such contractor is not responsible following bid opening. Among other things, a change in circumstances or change in information, as well as different criteria allowed to be considered for prequalification versus responsibility, may lead to a different result. For example, a prequalified contractor that becomes debarred between prequalification and bid opening, or a contractor who is subsequently discovered not to have been totally candid in answering its prequalification questionnaire, might be deemed non-responsible.
14. Prequalification of a contractor to bid on one project does not prequalify that contractor to bid on a different project or mean that the contractor will necessarily be deemed to be a responsible bidder for a different project.
15. Neither this prequalification process nor its implementation by the Authorities shall be deemed to create any contract right in any prospective contractor or to give any prospective contractor any right beyond that conferred by Code of Virginia §2.2-4317. All prospective contractors shall be responsible for their own expenses in applying for prequalification, and the Authorities shall have no liability for any such expense.

END OF PREQUALIFICATION PROCESS

- **Need for Special Meeting on April 26, 2018**

- **Annual Flushing Notice**

Following is the Annual Flushing Notice the Authority intends to post on its website and release to the media.



FOR IMMEDIATE RELEASE
January 18, 2018

For more information contact:
Bob Wichser, Executive Director
(804) 590-1145

ARWA Announces 2018 Schedule for Annual Water Transmission System Flushing Program

The Appomattox River Water Authority (ARWA) announced its schedule today for its annual water main line flushing program during the third week of March.

For the past twenty-three years, ARWA has annually flushed out its wholesale water transmission lines to remove any settled material (sediment, sand, etc.). Flushing of the system is a routine maintenance effort that helps assure appropriate water quality and availability to all ARWA customers. This process is completed by ARWA staff each year, generally in March.

The current schedule this year calls for the water main transmission line flushing to occur from March 20th to March 23rd. If inclement weather occurs, the flushing will be pushed back to the week of March 26th.

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

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

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About ARWA

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

- **Status Report: 6 Month Work Plan Update/Ongoing Projects/Operational and Financial Reports**

Following are status reports concerning an update on the 6 Month Work Plan, the Ongoing Projects, Operations, and Financials for ARWA.

Appomattox River Water Authority

Executive Level Strategic Work Plan Summary/Update

July 1, 2017 to December 31, 2017
UPDATE: January 1, 2018 to June 30, 2018

Purpose: Provide the Appomattox River Water Authority with a plan to ensure ongoing reliable service to Authority members.

This information is provided at the request of the Board and is intended to highlight critical activities that are planned and expected to be accomplished during the next six months. We realize that unplanned circumstances could occur that impact the Authority's financial capability to complete the tasks and projects, and are totally out of the control of Authority management. Projects are dependent on funding, engineering consultants and contractors.

Overarching Goal: The Authority will continue to expand as needed, operating and maintaining the water system in an efficient and economical manner consistent with good business and operating practices.

The Authority will provide safe, reliable drinking water meeting or exceeding the Safe Drinking Water Act regulation standards.

Capital Projects:

1. Complete the mediation services related to Branders Pump Station & Ground Tank: **Completed**
2. **Off-site Alternative Raw Water Supply Source ON-HOLD based on Board request**

In-Plant Capital Projects:

1. February 2017: Issue RFP for Engineering Services towards the In-Plant upgrade project: Engineer of Record selected, presently in preliminary design on In-Plant Project upgrade. This project held a kick-off meeting on June 19th. Expect to advertise for project equipment procurement by September 2017 with design finished by mid-November 2017.
Update: Final Design completed. Pre-Purchase of all project Pumps out for bid. Prequalification Process to be presented at January 18, 2018 Board Meeting. Expect construction bidding phase to occur from March to early April with contractor construction contract award at Special Board Meeting on April 26, 2018. Project construction phase expected to begin on April 27, 2018.
2. February 2017: Issue IFB (by Davenport) for Bond funding towards the In-Plant upgrade project: Davenport is handling this issue with the Authority and will make recommendations to the Board by mid-January 2018 to fund the In-Plant project.
Update: The Authority closed on the "In-Plant" project bond on December 20, 2017 for \$13.5M
3. March 2017: Interviews for Engineering Services: **Completed**
4. April/May: Seek Member local approval towards bond funding: On hold as per Board until January 2018: **Update: Completed November 2017**
5. June 15 Board Meeting: Award Bond Financing and Engineering Services Contract: Bond financing on hold. In-plant engineering service contract awarded.
Update: Both of the above complete as of December 20, 2017.

6. June-October: Preliminary to final design to bid stage: Presently on schedule with final 100% design schedule to be complete by mid-November 2017.
Update: "In-Plant" Project final design completed December 2017.
7. November/December: Hire Contractor: Most likely this time line will be February/March 2018.
Update: Expected bidding phase: March to early April 2018. Expected contractor construction contract award on April 27, 2018.
8. December/January 2018: Contractor mobilizes: Most likely this time line will be March/April 2018.
Update: Expected In-Plant Project construction phase: April 2018-December 2019.

Administration:

**** Extensive analysis and legal review over five months in notifying the Board related to the City of Petersburg's financial situation and potential upcoming financial impacts on the Authority.**

Update: This issue has been addressed and closed out.

****Managed an extremely difficult EEOC case stemming from the 2003-2011 era with ARWA legal and federal EEOC to settlement.**

Update: Item closed out.

1. January-May 2017: Develop, present, defend and public notice on proposed 2017/18 Operations & Maintenance Budget including Capital Projects: **Completed**
2. July 1, 2017-December 31, 2017: Working with department managers and Assistant Director to develop 2018/2019 operating and replacement budgets and present to member engineers in November 2017 for review and comments.
Update: This item was completed on November 9, 2017.
3. Pursue resolution on Commonwealth of Virginia matching \$5M grant: Phase 1, Step 1 of Dam Raise Project underway and Phase 1, Step 2 of project to be discussed with ARWA Board on July 20, 2017.
Update: Based on Subcommittee recommendation, narrative in grant funding will be requested to be amended by the General Assembly committee to reflect funding two bridge replacements as required as part of the dam raise project.
4. Continue to pursue adoption of Amended and Restated Unified Water Service Agreement: Amendment Four to the Water Service Agreement was developed and presented to the ARWA Board on May 18, 2017 and adopted for their respective Supervisors/Council members for approval.
Update: Three ARWA Member Governments have approved the Amendment Four and the Board will continue to consider full member approval based on acceptance of additional edits provided by the ARWA membership.
5. By June 2017 conduct training level water-related emergency event table-top exercise: This full day full member attended Drinking Water related Emergency Preparation Review was held on June 27, 2017 and was recognized as time well spent with excellent discussions along with specific water-related scenarios and regulatory reporting information provided.

Safety Related Projects: Upgrade to flocculation basins for Operator and Maintenance personnel access. This project will be complete in August 2017.

Update: This project was completed in October 2017.

Virginia Water Protection Permit:

January 2017-June 2017: Development of permit-required Chesdin Reservoir Storage Management Plan to be submitted to VA-DEQ for review and approval:

****Pre-planning sessions completed in June with public meeting to be held on evening of July 11, 2017.**

Update: Receipt of DEQ's approval on this permit required item was received on November 20, 2017.

- Development of renewal ARWA VPDES permit application to be submitted to VA-DEQ for review, approval and issuance of permit limits:

Update: Permit full renewal package was submitted to VA-DEQ in April. Numerous phone calls and meetings both on-site and at VA-DEQ have occurred related to the ARWA discharge permit.

The draft VPDES permit was issued for our review and consideration on January 10, 2018.

Facility Instrumentation/SCADA Upgrades:

- January – June: Migration of old 25+ year old communication equipment at the operations blue panel (SCP-A) to a new upgrade PLC: ***This upgrade project has been completed.***

Financial Auditing: March 2017- Issue RFP for annual financial auditing services for both ARWA & SCWWA and recommend three year contract by June 2017: ***Completed***

Facility Process Chemicals: January 2017-Issue new purchasing contracts based on annual IFB on all process chemicals: Complete award of annual chemical supplier contracts by February 1, 2017:

Completed

Update: February 1, 2018 to February 2, 2019-chemical bids opened on January 10, 2018 for award.

Additional Process Chemical Item: Completed a four month review and discussion with chlorine dioxide supplier by developing a three year contract with an annual three year price drop.

Update: Three year contract with an annual three year price drop for ARWA has been completed.

Maintenance Warehouse/Computerized Purchasing: Complete start-up and transition over to normal daily efficient operation of the warehouse: 85% complete as of July 2017.

Update: As of December 2017 now complete at 100%.

New Item: Schedule with Chesterfield University a two day (February 12 & 13, 2018) "Exemplary Leadership" course for all ARWA Managers and Supervisors. This course will address the five practices of exemplary leadership using the Leadership Challenge Model.

On-Going Department Goals

Administration/Warehouse:

- Develop digital archiving system for all documents that fall under record retention requirements: ***See SCWWA narrative related to this item.***

- Implement inventory control processes and procedures so that “Cycle Counts” of inventories can be performed throughout the year: ***Presently underway and approximately at 45% complete.***
- Develop and implement a compensation plan that will allow the Authority to pay employees “In Arrears” while providing minimal financial impact during such implementation: ***Presently In review and under consideration.***

Maintenance Department:

- Complete mechanical/electrical training for employees as needed
- Maintain schedule on preventive maintenance activities
- Effective and rapid response on corrective actions towards equipment failures
- Maintain parts and equipment inventory in a cost effective manner

Laboratory Department:

- Maintain Member’s Safe Drinking Water Act/VDH analytical (THM/HAA) testing requirements
- Maintain Member’s Safe Drinking Water Act/VDH bacterial testing requirements
- Maintain ARWA VDH process analytical testing requirements
- July 1, 2017-December 31, 2017: Spec and order replacement laboratory analytical equipment: TOC unit & AA unit.

Operations Department:

- Maintain water plant production at all times to meet member demands
- Maintain finished water quality to meet all Safe Drinking Water Act/VDH regulatory requirements
- Ensure all Operators maintain DPOR required annual training requirements
- Ensure all Operators continue to strive for Class 1 Waterworks Operator license
- Maintain Water Product Facility in a clean and orderly manner

IT/Instrumentation Office:

- Ensure all process instrumentation is functional and accurate
- Ensure the Supervisory Control and Data Acquisition System is functioning to enable Operations Department to operate the process control equipment
- July 1, 2017 to December 31, 2017: Under Design replacement of 1960’s instrument equipment with 2017/18 HMI screens and connection into SCADA. Project expected to be complete by June 2018.

Update: HMI Upgrade project presently under design with Instrumentation consultant. Project expected to be installed and completed by December 2018.

MEMORANDUM

TO: APPOMATTOX RIVER WATER AUTHORITY BOARD OF DIRECTORS

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

SUBJECT: STATUS REPORT – ON-GOING PROJECTS

DATE: JANUARY 18, 2018

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

In-Plant Capital Projects:

- The 100 percent design plans and specifications were submitted were received by the Authority in December, 2017. These documents were also forwarded to VDH for final review.
- VDH has approved the Preliminary Engineering Report in December, 2017.
- Pre-final Request for Qualifications for Construction Contractors has been prepared and reviewed. Following Board action, we will advertise the RFQ in January, 2018. The project award is estimated to be March/April, 2018.

Annual Maintenance Inspection

- The final Annual Maintenance Inspection was submitted in December, 2017.

MEMORANDUM

TO: APPOMATTOX RIVER WATER AUTHORITY BOARD OF DIRECTORS

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

SUBJECT: OPERATING AND FINANCIAL STATUS REPORT

DATE: JANUARY 18, 2017

Operating Status Report

General:

- The next scheduled Board of Directors Meeting is **Thursday March 15, 2018** at the South Central Wastewater Authority at 2:00 pm.
- The ARWA has met with DEQ regarding our VPDES Permit renewal and based on that meeting it appears our permit will be upgraded from a Minor Industrial to a Major Industrial. This change will also increase the cost of the Authority's permit.
- W-2s have been completed and distributed.
- The Authority is transitioning to leased uniforms and staff is currently being measured for the new uniforms.
- The Appomattox River Water Authority was recently informed that we achieved the American Water Works Directors Award again for the 2017 reporting period.

Operations:

- Finished water met all permit requirements for the month of November and December. Copies of the VDH monitoring reports are available if anyone would like to see them.
- A recent update of our Alum feed system has improved our coagulant dosing efficiency. We have been feeding approximately 30-35% less alum while still being able to maintain AWWA partnership standards.
- Chemical bids for February 2018 thru January 2019 were opened on Wednesday January 10th.
- Staff has been monitoring a leak at a joint in one of our basins. This was thought to have been repaired last year but opened back up with the extreme cold weather we recently experienced. We have been informed that we need to wait for warmer weather before attempting any additional repairs.
- New alum feed pumps 1 & 2 and piping have been tested and staff is ready for maintenance to work on updating the alum feed system from feed pumps 3 – 6.
- Calgon will be onsite January 22nd to begin replacement of the Granular Activated Carbon (GAC) for filters 21-32. The filters are now scheduled to have the GAC changed out every 3 years with regenerated GAC.
- Manager and Chief are evaluating resumes to fill an open operator position.

Maintenance:

- Staff are awaiting supplies to re-plumb and reorganize the alum feeds from pumps 3 – 6.
- Work continues on updating the maintenance management system to include all Preventative Maintenance schedules.
- The divers have completed the installation of the valve stem for the 14' influent gate at the dam.

- The Authority's painting contractor will be onsite over the next few weeks to paint the pipe gallery piping at filters 17-32 and the Connex buildings onsite.
- The contractor hired to repair RWPS P22 check valve was onsite the week of January 8th. Once repairs are completed on P22 they will inspect and remove P23 check valve for repairs.

Instrumentation/IT:

- Staff had a conference call and onsite visit with our system integrator to discuss and plan budgeted projects for this fiscal year.
- Work continues installing local displays to provide more information to the operations staff.
- The new facility wide emergency notification system has been installed.
- Staff has been troubleshooting some generator transfer issues.

Laboratory:

- The lab is receiving this quarters THMs and HAAs.
- They have informed maintenance that one of our bacteriological sampling field taps is no longer working. Maintenance has this on their schedule for replacement.
- The new TOC analyzer has been ordered.

Financial Status Report:

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

Appomattox River Water Authority
YTD Income Statement for the period ending December 31, 2017

Water Rate Center

Revenues and Expenses Summary

<i>Budget</i>	<i>Budget</i>	<i>Actual</i>	<i>Budget</i>	<i>Variance</i>
<i>FY 17/18</i>	<i>Year-to-Date</i>	<i>Year-to-Date</i>	<i>vs. Actual</i>	<i>Percentage</i>

Operating Budget vs. Actual

Revenues

Water Sales	\$ 9,649,733	\$ 4,824,867	\$ 5,294,726	\$ 469,859	9.74%
Rent Income	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Misc. Revenue	\$ 32,490	\$ 16,245	\$ 1,320	\$ (14,925)	-91.87%
Total Operating Revenues	\$ 9,682,223	\$ 4,841,112	\$ 5,296,046	\$ 454,934	9.40%

Expenses

Personnel Cost	\$ 2,240,100	\$ 1,120,010	\$ 1,098,278	\$ (21,732)	-1.94%
Contractual/Professional Services	\$ 809,200	\$ 404,638	\$ 634,843	\$ 230,205	56.89%
Utilities	\$ 798,000	\$ 399,000	\$ 378,103	\$ (20,897)	-5.24%
Communication/Postal/Freight	\$ 32,200	\$ 16,100	\$ 17,254	\$ 1,154	7.17%
Office/Lab/Purification Supplies	\$ 96,500	\$ 48,250	\$ 60,577	\$ 12,327	25.55%
Insurance	\$ 90,000	\$ 90,000	\$ 84,840	\$ (5,160)	-5.73%
Lease/Rental Equipment	\$ 20,000	\$ 10,000	\$ 8,916	\$ (1,084)	-10.84%
Travel/Training/Dues	\$ 46,400	\$ 23,200	\$ 12,146	\$ (11,054)	-47.65%
Safety/Uniforms	\$ 22,000	\$ 11,000	\$ 14,499	\$ 3,499	31.81%
Chemicals	\$ 2,200,000	\$ 1,100,000	\$ 1,022,814	\$ (77,186)	-7.02%
Repair/Maintenance Parts & Supplies	\$ 425,000	\$ 212,500	\$ 130,236	\$ (82,264)	-38.71%
Total Operating Expenses	\$ 6,779,400	\$ 3,434,698	\$ 3,462,508	\$ 27,810	0.81%
Operating Suplus/(Deficit)	\$ 2,902,823	\$ 1,406,413	\$ 1,833,537	\$ 427,124	30.37%

Replacement Outlay Budget vs. Actual

Machinery & Motors	\$ 125,000	\$ 62,500	\$ 38,207	\$ (24,293)	-38.87%
Instrumentation	\$ 86,000	\$ 43,000	\$ 23,108	\$ (19,892)	-46.26%
SCADA	\$ 230,000	\$ 115,000	\$ 6,862	\$ (108,138)	-94.03%
Computer Equipment	\$ 10,000	\$ 5,000	\$ 8,424	\$ 3,424	68.49%
Furniture/Fixtures	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Motor Vehicles	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Flocculation Basins	\$ -	\$ -	\$ 20,000	\$ 20,000	#DIV/0!
Valve Replacement	\$ 100,000	\$ 50,000	\$ 1,402	\$ (48,598)	-97.20%
Warehouse Racks & Shelving	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Concrete	\$ 50,000	\$ 25,000	\$ -	\$ (25,000)	-100.00%
Pre-Chem Boiler	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Off-Site Reservoir	\$ 250,000	\$ 125,000	\$ -	\$ (125,000)	-100.00%
Reservoir Storage	\$ -	\$ -	\$ 61,055	\$ 61,055	#DIV/0!
Lime Feed Improvements	\$ -	\$ -	\$ -	\$ -	#DIV/0!
In-Plant Capital Upgrade	\$ 600,000	\$ 300,000	\$ 514,500	\$ 214,500	71.50%
Repair and Replace Shafts	\$ -	\$ -	\$ 37,080	\$ 37,080	#DIV/0!
Replacement-Other	\$ -	\$ -	\$ 14,210	\$ 14,210	#DIV/0!
Total Capital Outlay	\$ 1,451,000	\$ 725,500	\$ 724,849	\$ (651)	-0.09%

Debt Service Budget vs. Actual

Interest Income	\$ -	\$ -	\$ 37,207	\$ 37,207	#DIV/0!
Interest Jurisdictions (Income)	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Interest Expense	\$ -	\$ -	\$ 240,748	\$ 240,748	#DIV/0!
Principal Payments	\$ 1,576,426	\$ -	\$ 598,000	\$ 598,000	#DIV/0!

Appomattox River Water Authority-Balance Sheet
For Month Ending December 31, 2017

Assets

Current Assets

Petty Cash	\$	400
SunTrust Operating Fund	\$	1,138,068
SunTrust Replacement Fund	\$	-
Total Unrestricted Cash	\$	1,138,468

Water Revenue	\$	4,012,485
Reserve Account	\$	2,344,640
Replacement Account	\$	155,676
Debt Service Reserve	\$	2,148,692
Bond Principal/Interest	\$	335,631
Bond Construction	\$	12,888,351
Total Restricted Cash	\$	21,885,475

Total Checking/Savings **\$ 23,023,943**

Accounts Receivable	\$	2,413,423
Other Current Assets	\$	4,409
Inventory	\$	131,470

Total Current Assets **\$ 25,573,246**

Fixed Assets

Land and Land Rights	\$	1,090,685
Water System	\$	85,248,334
Equipment	\$	1,094,840
Hydro	\$	34,873
Construction in Progress	\$	58,725
Accumulated Amortization	\$	(32,780)
Accumulated Depreciation	\$	(44,469,352)
Total Fixed Assets	\$	43,025,324

Other Assets

Pension	\$	322,971
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Total Assets **\$ 68,921,541**

Liabilities & Equity

Current Liabilities

Accounts Payable	\$	81,430
Retainage Payable	\$	-
Accrued Interest Payable	\$	120,374

Total Current Liabilities **\$ 201,804**

Long Term Liabilities

Pension	\$	326,043
Bonds Payable-2010	\$	7,820,000
Bonds Payable-2012	\$	2,597,000
Bonds Payable-2017	\$	13,500,000
Accrued Leave Payable	\$	170,612
Post Employment Benefit	\$	63,300

Total Long-Term Liabilities **\$ 24,476,955**

Total Liabilities **\$ 24,678,759**

Equity

Retained Earnings	\$	(3,504,941)
Reserve for Operations	\$	3,068,942
Reserve for Water Revenue	\$	7,626,208
Reserve for Replacements	\$	500,000
Reserve for Bond Interest	\$	120,374
Reserve for Debt Service	\$	1,066,426
Reserve for Bond Principal	\$	598,000
Reserve for Reserve	\$	1,852,301
Fixed Assets, Net of Debt	\$	32,010,323

Net Income	\$	905,149
Total Equity	\$	44,242,781

Total Liabilities & Equity **\$ 68,921,541**

- **Presentation of Proposed FY 2018/19 Operating Budget**

Following is a memo and presentation of the Proposed FY2018/19 Operating Budget.

MEMORANDUM

**TO: APPOMATTOX RIVER WATER AUTHORITY
BOARD OF DIRECTORS**

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

SUBJECT: FISCAL YEAR 2018-2019 PROPOSED BUDGET

DATE: JANUARY 18, 2018

We are pleased to present to you the Appomattox River Water Authority fiscal year 2018-2019 proposed budget for your review and consideration. The Board is not requested to approve at today's meeting the proposed budget; however, we request that you review and advise staff to ready the proposed budget to advertise for a public hearing at the March 15, 2018 Board Meeting by the required 14-day period in advance of the scheduled public hearing. Any Board requested changes to the proposed budget by the Board can be made on or before the May 17, 2018 Board Meeting where you will approve the budget.

A review of the proposed budget changes follows for your consideration.

Cost items increasing are:

- Hospitalization Insurance: \$30,000
- OPEB Health Insurance Adjustment: \$64,500
- Other Consulting Services: \$50,000
- Repair Services: \$44,000
- Service Contracts: \$25,000
- Heating Fuel: \$25,000

Cost items reducing are:

- Repair & Maintenance Supplies-Shop: - \$70,000
- Vehicle & Equipment Fuels: -\$15,000
- Equipment Parts: -\$10,000

Debt Service:

FY 2018/19 Bond payments are set at \$2,142,226, with the new "In-Plant" project costing \$1,080,225

Salaries & Wages:

It is important to understand that the maintenance and operation of our water infrastructure that provides for the quality expected of drinking water is not only supported by implementing the latest technologies, but also by investing in a skilled workforce. Thus we are requesting a performance based salary increase up to three (3%) percent for our employees effective July 2018. As stated in last year's budget memorandum, a significant portion of the Authority's workforce will exit the field in the next three to five years (Hazen and Sawyer Merger Analysis, April 2014), depleting the pool of experienced certified and licensed operational professionals. The job sector in the water field now requires a more skilled workforce. The upcoming retirement of experienced mentors who can train new personnel further exacerbates the problem. The anxiety will grow higher as retiring employees, aging infrastructure, and competition for certified and licensed employees between other local utilities and the private sector continues to make it difficult for the Authority to attract and maintain new employees. We must continue to invest in our skilled employees and maintain market competitive salaries.

Each employee will be rated in May 2018 on the following:

- Knowledge & Ability
- Productivity
- Initiative
- Interpersonal Relationships
- Time Management
- Communication
- Attendance
- Judgment
- Adaptability
- Meeting defined goals

An average employee would receive a 2% salary increase with only the highest scoring employees eligible for an increase higher up to 3% maximum. Non-performing employees will receive less than 2%, with certain employees with a lower score being placed into a required performance improvement probation period.

Replacement Fund

The Replacement Fund is being decreased from \$851,000 to \$784,000 (decrease of \$67,000). The following additions and/or adjustments have been made:

- Addition of \$45,000 to cover replacement of worn flocculator equipment

- Addition of \$265,000 for SCADA instrumentation upgrade/replacements and continued upgrade of the filter tables to HMIs
- Addition of a \$28,000 reservoir work boat
- Addition of \$40,000 for Chesdin East Pump Station flow meter upgrade
- Reduction from \$250,000 to \$200,000 for Off-Site Reservoir Legal/Engineering due to Board placing this project on hold

Construction Fund

The Construction Fund (Capital Projects) contains the implementation of the May 2016 Board approved “In-Plant” project (Upgrades to: Finished Water Pump Station No. 1, Raw Water Pump Station No. 1, Raw and Finished Water Pump Station electrical upgrades, and a new Emergency Generator) with a ninety-percent design cost estimate at \$13.5M by the Engineer.

Rate Consideration:

As you reflect on the below proposed rate changes for 2018/19, consider the following proposed ARWA wholesale rate table below showing the proposed changes:

ARWA Member	FY2017/18	FY2018/19	% Diff / est. Annual \$ Diff
Chesterfield	0.9049	0.9984	10.33% / \$637,878
Colonial Heights	0.9004	0.9775	8.57% / \$43,015
Dinwiddie	1.4143	1.5774	11.53% / \$38,045
Petersburg	0.9021	0.9965	10.47% / \$150,177
Prince George	1.3539	1.4456	6.78% / \$29,424

BOARD ACTION REQUESTED:

No budget approval action is required by the Board at this time. Board approval to advertise the 2018-2019 proposed budget is requested. The public hearing on the proposed budget will be at the March 15, 2018 Board of Directors meeting (to be held at SCWWA). Final Board action on budget approval is scheduled to be taken at the May 17, 2018 ARWA Board of Directors meeting (to be held at ARWA). Any budget changes or edits required or requested by the Board can be taken before or during the May Board of Directors meeting.

APPOMATTOX RIVER WATER AUTHORITY

Proposed: January 18, 2018

Approved:

PROPOSED OPERATION & MAINTENANCE BUDGET 2018/2019

			Change	
			Increase/ (Decrease) FY17/18 to FY18/19	Reason for Changes
	<u>2017/2018</u> Budget	<u>2018/2019</u> Budget		
<u>O&M EXPENSES</u>				
41000 · Personal Services	\$1,610,000	\$1,655,000	\$45,000	Budget includes up to a 3.0% pay for performance increase.
42000 · Employee Benefits	\$630,100	\$723,100	\$93,000	Primary increase due to OPEB Adjustment
42100 · Employer FICA	\$123,000	\$123,000		
42200 · Virginia Retirement System	\$96,000	\$96,000		
42210 · Deferred Comp 457	\$6,300	\$6,300		
42300 · Hospitalization Insurance	\$370,000	\$400,000		
42400 · VRS Group Life Insurance	\$21,300	\$21,300		
42500 · Group Term Life	\$2,000	\$2,000		
42600 · Unemployment Insurance	\$1,500	\$0		
42800 · Employee Promotions	\$3,500	\$3,500		
42900 · Other Fringe Benefits - EAP	\$2,000	\$2,000		
42950 · OPEB Health Insurance Adj	\$4,500	\$69,000		
42952 · Net Pension Adjustment				
43000 · Contractual Services	\$809,200	\$937,500	\$128,300	Increase primarily due to Other Consulting Services, Repair Services, and Service Contracts. Other Consulting Services is for a rate study to be performed and the Repair Service and Service Contracts increase is offset by the reduction in Repair and Maintenance Supplies-Shop.
43121 · Auditing Services	\$10,000	\$8,000		
43122 · Accounting Services	\$7,500	\$9,000		
43140 · Consulting Engineers	\$75,000	\$75,000		
43150 · Legal Services	\$75,000	\$75,000		
43152 · Medical - Testing	\$2,000	\$2,500		
43155 · Other Consulting Services	\$0	\$50,000		
43156 · Admin and Maintenance Svc-SCWWA	\$1,700	\$5,000		
43160 · Trustee Services	\$10,000	\$7,500		
43162 · Bank Service Charges	\$1,500	\$2,500		
43170 · Research	\$15,000	\$17,500		
43180 · Potable Water Contract	\$500,000	\$500,000		
43190 · Samples and Tests	\$25,000	\$25,000		
43200 · Lake Patrol	\$4,000	\$4,000		
43201 · Lake Patrol				
43210 · Software Support	\$15,000	\$20,000		

APPOMATTOX RIVER WATER AUTHORITY**Proposed: January 18, 2018****Approved:****PROPOSED OPERATION & MAINTENANCE BUDGET 2018/2019**

			Change	
			Increase/ (Decrease) FY17/18 to FY18/19	Reason for Changes
	<u>2017/2018</u> Budget	<u>2018/2019</u> Budget		
43220 · VPDES Permit Fee	\$500	\$500		
43310 · Repair Services	\$6,000	\$50,000		
43320 · Service Contracts	\$25,000	\$50,000		
43500 · Printing and Binding	\$1,000	\$1,000		
43600 · Grounds Maintenance	\$35,000	\$35,000		
45000 · Other Charges	\$977,600	\$1,017,600	\$40,000	Increase primarily due to Heating fuel costs.
45110 · Electricity - Pumping	\$450,000	\$450,000		
45111 · Electricity - Purification	\$270,000	\$270,000		
45120 · Heating Fuel	\$75,000	\$100,000		
45130 · Trash Pickup	\$3,000	\$4,000		
45210 · Postal Services	\$2,200	\$2,200		
45220 · Freight	\$5,000	\$12,000		
45230 · Telecommunications	\$25,000	\$25,000		
45304 · Property Insurance				
45308 · General Liability Insurance	\$90,000	\$90,000		
45410 · Lease/Rent of Equipment	\$20,000	\$20,000		
45510 · Mileage Allowance				
45530 · Meals and Lodging	\$5,000	\$10,000		
45540 · Education and Training	\$16,400	\$16,400		
45550 · Safety Supplies	\$16,000	\$18,000		
46000 · Materials and Supplies	\$2,752,500	\$2,764,000	\$11,500	Increase due to chemical costs
46001 · Office Supplies	\$12,000	\$12,000		
46004 · Laboratory Supplies	\$74,000	\$74,000		
46005 · Purification Chemicals	\$2,200,000	\$2,300,000		
46006 · Purification Process and Janitorial Supplies	\$10,500	\$15,000		
46007 · Repair & Maint Supplies-Shop	\$220,000	\$150,000		
46008 · Vehicle and Equipment Fuels	\$35,000	\$20,000		
46009 · Vehicle and Equipment Supplies	\$10,000	\$10,000		
46010 · Equipment Parts	\$75,000	\$65,000		
46011 · Uniforms	\$6,000	\$8,000		
46012 · Dues and Subscriptions	\$25,000	\$25,000		
46014 · Repair & Maint Supplies-IT	\$65,000	\$65,000		

APPOMATTOX RIVER WATER AUTHORITY

Proposed: January 18, 2018

Approved:

PROPOSED OPERATION & MAINTENANCE BUDGET 2018/2019

			Change	
			Increase/ (Decrease) FY17/18 to FY18/19	Reason for Changes
	<u>2017/2018</u> Budget	<u>2018/2019</u> Budget		
46015 - Small Equipment Purchases	\$10,000	\$10,000		
46016 - Operations Supplies and Maintenance	\$10,000	\$10,000		
Total Operating Expenses	\$6,779,400	\$7,097,200	\$317,800	
58000 - Equipment Replacement	\$851,000	\$784,000	(\$67,000)	
Debt - 2010 Issue	\$764,540	\$759,778	(\$4,763)	
Debt - 2012 Issue	\$301,886	\$302,223	\$337	
Debt - 2017 Issue	\$510,000	\$1,080,225	\$570,225	In-Fence Project Financing for 15 years
Total Debt	\$1,576,426	\$2,142,225	\$565,799	
Reserve Fund	\$475,397	\$554,847	\$79,450	Adjusted to factor increased O&M
Total Expenses	\$9,682,223	\$10,578,272	\$896,049	

APPOMATTOX RIVER WATER AUTHORITY
Replacement Fund Budget - 58000

Acct#	Proposed FY ITEM	Budget 17/18	FY18/19 Proposed Budget 18/19	INFORMATIONAL & PLANNING				Totals
				19/20	20/21	21/22	22/23	
	Emergency/ Miscellaneous Repairs	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 600,000
58010 - Machinery and Motors	Flocculator Equipment		\$ 45,000					
	Exterior Actuators	\$ 25,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 100,000
58020 - Instrumentation	Conversion of ModBus+ to TCP (ethernet) - 4 segments	\$ 36,000						\$ 36,000
	Laboratory AA	\$ 25,000						\$ 25,000
	Benchtop TOC Analyzer	\$ 25,000						\$ 25,000
58030 - SCADA	Replace and move existing LAN Panel		\$ 35,000					\$ 35,000
	SCADA Server Upgrade (3)		\$ 15,000					
	SCADA/Network Master Plan Development		\$ 15,000					
	MDT Autosave Revision control software	\$ 30,000						\$ 30,000
	Upgrade Filter Tables to HMIs with redundant PLCs	\$ 200,000	\$ 200,000	\$ 400,000	\$ 300,000			\$ 1,100,000
58040 - Computer Equipmment	Plant GIS							\$ -
	Replacement Computers	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 60,000
58050 - Furniture and Fixtures	Upgrade SCADA/Employee lunchroom			\$ 15,000				\$ 15,000
	Upgrade Facility Lighting		\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 6,000	\$ 30,000
58060 - Motor Vehicles	Reservoir Sampling work boat		\$ 28,000					\$ 28,000
	Maintenance Truck				\$ 35,000			\$ 35,000
	Warehouse Truck			\$ 35,000				\$ 35,000
	Operations Truck					\$ 35,000		\$ 35,000
58070 - Special Studies								\$ -
	Valve Replacement	\$ 100,000	\$ 50,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 550,000

58090 - Construction	Gate Valve to Sed basins 1-3			\$ 225,000					\$ 225,000
	General Concrete Repairs	\$ 50,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 175,000
	Chesdin East Flow Meter Upgrades (16" and 30")		\$ 40,000						\$ 40,000
	Off-Site Reservoir or Dam Raise Legal &/or Engineering	\$ 250,000	\$ 200,000	\$ 400,000					\$ 850,000
TOTALS:		\$ 851,000	\$ 784,000	\$ 1,331,000	\$ 591,000	\$ 291,000	\$ 256,000	\$ 4,029,000	

NOTE: FY 18/19 TO BE APPROVED WITH BUDGET

Construction Fund (Capital Projects)

FY18/19

ITEM	Budget 17/18	Proposed Budget 18/19	INFORMATIONAL & PLANNING							Totals	>10 years
			19/20	20/21	21/22	22/23	23/24	24/25	25/26		
Finished Water Pump Stations No. 1 Upgrade - see note 2	\$ 475,000	\$ 3,886,983	\$ 3,886,983							\$ 8,248,965	
Raw Water Pump Station No. 1 Upgrade - see note 2	\$ 475,000	\$ 2,321,263	\$ 2,321,263							\$ 5,117,525	
Clearwell #4										\$ -	\$ 8,750,000
PAC Feed System							\$ 2,500,000			\$ 2,500,000	
Transmission Main - Chesdin Rd. to Pickett Rd								\$ 400,000	\$ 9,969,000	\$ 10,369,000	
Transmission Main - Pickett Ave. to Matoaca Tank								\$ 400,000	\$ 9,969,000	\$ 10,369,000	
Transmission Main - Matoaca Tank to Branders Bridge								\$ 500,000	\$ 11,446,000	\$ 11,946,000	
Transmission Main - Branders Bridge to Lakeview								\$ 200,000	\$ 3,326,000	\$ 3,526,000	
Regional Cooperative Infrastructure Initiative (including engineering)			\$ 3,550,000							\$ 3,550,000	
Totals	\$ 950,000	\$ 6,208,245	\$ 6,208,245	\$ -	\$ -	\$ -	\$ 2,500,000	\$ 1,500,000	\$ 34,710,000	\$ 52,076,490	

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 Project.

Revenues**Appomattox River Water Authority**

FY Budget Year

2018/2019

Proposed

Jan. 18, 2018

Adopted

Revised

		<u>Chesterfield</u>	<u>Colonial Heights</u>	<u>Dinwiddie</u>	<u>Petersburg</u>	<u>Prince George</u>	<u>Total</u>
1) Operations and Maintenance Base Rate							
O&M Rate							
	\$/1000 gallons	\$ 0.8084	\$ 0.8084	\$ 0.8084	\$ 0.8084	\$ 0.8084	\$ 0.8084
Estimated (\$/quarter)		\$ 1,457,156	\$ 125,490	\$ 86,819	\$ 347,406	\$ 49,221	\$ 2,066,091.75
Total annual allocation		\$ 5,828,624	\$ 501,961	\$ 347,276	\$ 1,389,624	\$ 196,882	\$ 8,264,367
% of flows		70.53%	6.07%	4.20%	16.81%	2.38%	100.00%
Estimated (mgd)		19.75	1.70	1.18	4.71	0.67	28.008
Calc. annual usage (bg)		7.210	0.621	0.430	1.719	0.244	10.223
O&M =	\$ 7,097,200	Replacement =	\$ 784,000	54.38% 2010 Debt (maintenance) =		\$ 413,167	
Int./Misc. Income	\$ 30,000						
Reserve Policy Rate							
Allocation	%	69.31%	4.39%	6.75%	16.69%	2.86%	100%
Annual Charge	\$/year	\$ 384,564	\$ 24,358	\$ 37,452	\$ 92,604	\$ 15,869	\$ 554,847
Quarter Charge	\$/Quarter	\$ 96,141	\$ 6,089	\$ 9,363	\$ 23,151	\$ 3,967	\$ 138,712
Reserve Policy Rate	\$/1000gals	\$ 0.0533	\$ 0.0392	\$ 0.0872	\$ 0.0539	\$ 0.0652	
FY 18/19 Reserve Policy Charge	\$554,847						
BASE RATE	\$/1000gals	\$ 0.8617	\$ 0.8476	\$ 0.8956	\$ 0.8623	\$ 0.8736	
2) Debt Service							
Bonds		% Financed					
Rate (cents/1000 gals)		\$ 0.0038	\$ 0.0322	\$ 0.4646	\$ -	\$ 0.4097	
2010 expansion (\$/year)	45.62%	\$ 27,278	\$ 19,965	\$ 199,578	\$ -	\$ 99,789	\$ 346,610
% allocation		7.87%	5.76%	57.58%	0.00%	28.79%	100.00%
Rate (cents/1000 gals)		\$ 0.0291	\$ 0.0214	\$ 0.0475	\$ 0.0293	\$ 0.0355	
2012 Maintenance (\$/year)	100.00%	\$ 209,470	\$ 13,268	\$ 20,400	\$ 50,441	\$ 8,644	\$ 302,223
% allocation		69.31%	4.39%	6.75%	16.69%	2.86%	100.00%
Rate (cents/1000 gals)		\$ 0.1038	\$ 0.0764	\$ 0.1697	\$ 0.1049	\$ 0.1269	
(1) 2017 In-Fence Upgrades (\$/year)	100.00%	\$ 748,704	\$ 47,422	\$ 72,915	\$ 180,290	\$ 30,894	\$ 1,080,225
% allocation		69.31%	4.39%	6.75%	16.69%	2.86%	100.00%
FY16/17 Bond Payments	2010 =	\$ 759,778	2012 =	\$ 302,223	2017 =	\$ 1,080,225	
TOTAL DEBT SERVICE RATE	\$/1000 gals	\$ 0.1367	\$ 0.1299	\$ 0.6818	\$ 0.1342	\$ 0.5721	
	\$/year	\$ 985,453	\$ 80,654	\$ 292,894	\$ 230,730	\$ 139,327	\$ 1,729,058
3) Total Rate							
TOTAL RATE (BASE + EXPANSION)	\$/1000gals	\$ 0.9984	0.9775	1.5774	0.9965	1.4456	\$ 1.1991
Estimated annual charges	\$/year	\$ 7,198,641	\$ 606,973	\$ 677,622	\$ 1,712,958	\$ 352,078	\$ 10,548,272
4) Budget Comparison							
Proposed FY18/19 Total Rate	\$/1000 gals	\$ 0.9984	\$ 0.9775	\$ 1.5774	\$ 0.9965	\$ 1.4456	\$ 1.1991
Approved FY 17/18 Total Rate	\$/1000 gals	\$ 0.9049	\$ 0.9004	\$ 1.4143	\$ 0.9021	\$ 1.3539	\$ 1.0951
Total Rate Difference	\$/1000 gals	0.0935	0.0772	0.1631	0.0944	0.0917	0.1040
Total Rate Difference	%	10.33%	8.57%	11.53%	10.47%	6.78%	9.49%
Proposed FY18/19 Revenues	\$/year	\$ 7,198,641	\$ 606,973	\$ 677,622	\$ 1,712,958	\$ 352,078	\$ 10,548,272
Total FY17/18 Approved Budget	\$/year	\$ 6,560,763	\$ 563,958	\$ 639,577	\$ 1,562,781	\$ 322,654	\$ 9,649,733
Annual Cash Difference	\$/year	\$ 637,878	\$ 43,015	\$ 38,045	\$ 150,177	\$ 29,424	\$ 898,539
Annual Revenue Difference	%	9.72%	7.63%	5.95%	9.61%	9.12%	9.31%
FY 18/19 Expenses	\$ 10,578,272	FY 18/19 Income Revenue	\$ 10,578,272				

NOTES:

1) 2017 Issue Debt Service includes In-Plant Project Financing of \$13,500,000 for 15 years

Reserve Policy: Appomattox River Water Authority FY18/19

Reserve Fund Calculation (year 4 of 5)

ARWA O&M Budget	Reserves as of 6/30/2017	Revenue for FY2017/2018	Total expected reserves on 6/30/2018	Recommended 50% O&M Reserves	Charges required to achieve 50% reserves	Annual Charge spread over 2 years (adjusted annually)
\$7,097,200	\$1,963,509	\$475,397	\$2,438,906	\$3,548,600	\$1,109,694	\$554,846.87

5. Items from Counsel

6. Closed Session

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

- Financial Disclosure

8. Adjourn