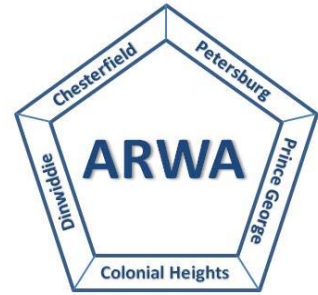


Appomattox
River
Water
Authority



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

Appomattox River Water Authority

Board of Directors Meeting

DATE: March 21, 2019

TIME: 2:00 PM

LOCATION: South Central Wastewater Authority
Board Room, Administration Building
900 Magazine Road
Petersburg, Virginia 23803

AGENDA

1. Call to Order/Roll Call
2. Approval of Minutes: Minutes of the Regular Board Meeting on January 16, 2019
3. Public Comment and Public Hearing on Proposed FY 2019/2020 Budget
4. Executive Director's Report:
 - Reservoir Status Update for February 2019
 - Status Report: Ongoing Projects/Financials
5. Items from Counsel
6. Closed Session
7. Other Items from Board Members/Staff Not on Agenda
8. Adjourn

Cc: W. Dupler/George Hayes, Chesterfield
L. Lyons, Petersburg Public Works
W. Henley, Colonial Heights
R. Wilson, Dinwiddie Water Authority
F. Haltom, Prince George
A. Anderson, McGuire Woods

1. Call to Order/Roll Call

2. Approval of Minutes: Minutes of the Board Meeting held on January 16, 2019

Following are minutes of the Regular Scheduled Board Meeting held on January 16, 2019

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

BOARD OF DIRECTORS MEETING
Appomattox River Water Authority
January 16, 2019 at 2:30 p.m.
Location: Appomattox River Water Authority
21300 Chesdin Road, S. Chesterfield, VA 23803

PRESENT:

Doug Smith, Chairman (Colonial Heights)
Kevin Massengill, Vice-Chairman (Dinwiddie)
George Hayes, Secretary/Treasurer (Alternate, Chesterfield)
Percy Ashcraft, (Prince George)
Joseph Casey, (Chesterfield)
Robert B. Wilson, (Alternate, Dinwiddie)
Lionel Lyons, (Alternate, Petersburg)
Frank Haltom, (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:

Denny Morris, (Crater Region Planning Commission)
Peter Nash, (Golder Associates)
Steven Nebiker, (HydroLogics)
Dave Yost, Resident
Lowell Thomason, Resident
Dave Lumsden, Resident
Bill Roberts, Resident

Mr. Smith, Chairman, called the meeting to order at 3:08 p.m.

1. Call to Order/Roll Call.

The roll was called.

Mr. Smith stated before we move into the next item of Approval of Minutes, he had a special recognition that we would like to do for our former Chairman, Mr. Percy Ashcraft. The Resolution was read and entered as part of these approved minutes.

Mr. Smith thanked Mr. Ashcraft for his service and stated we had another gift to pass along. Dr. Wichser asked Mr. Ashcraft to come up front and stated as gratitude for his many years of service we are presenting you a cap making you an honorary member of the Water Treatment Plant and also the Wastewater Treatment Plant. He further stated to Mr. Ashcraft that we know that you are a sportsman so we are presenting you a water bottle container with a seal on it, and also a card with gift certificates. Mr. Ashcraft stated he didn't expect this but he'll accept it because you are right that it was two years of interesting dialogue. He further stated that this Authority is pretty special to this region. He stated sometimes we lose sight of the impact of our decisions, and they are very important. He further stated he was able to have served in both roles at the same time. He stated he hopes that makes it easy for Mr. Smith and whoever follows him in the future, because he does believe it provided some stability to the whole dynamic and the cooperation that he got from Staff was just incredible. He stated we did accomplish a few things. He doesn't want to ever say he wasn't disappointed with the number of things we didn't accomplish, but there were some things he would like to have seen advance a little further along during his time. He is anxious to participate, and hopefully we can still get there. He stated he does appreciate the recognition, and he thinks a lot of everyone. Mr. Smith thanked Mr. Ashcraft for all his hard-dedicated work and continuing on the Board here as well.

2. Approval of Minutes: Minutes of the Regular Meeting of the Board held on November 15, 2018

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

RESOLVED, that the Minutes of the Regular Meeting of the Board held on November 15, 2018 are hereby approved:

For: 5 Against: 0 Abstain: 0

3. Public Comment

Mr. Smith stated the next item is Public Comment. He explained this would be for general public comment, and we will have a Public Hearing several items later on the Agenda regarding the Agreement for Irrigation Withdrawal from Lake Chesdin. He asked if there were any other Public Comments on other items.

Mr. Dave Yost of 3601 Leonards Lane, Sutherland, VA, stated he is just up the river from ARWA and has been there for about a decade. He wanted to just give a quick request for consideration for the Authority to take a look to see if you can ban boats that are using wake enhancing accessories on the river. He stated all boats create boat wash or boat wake and it causes shore erosion, all boats do that. He further stated over the last five years, there's been a steady increase in the amount of boats using wake enhancing accessories on Lake Chesdin. He stated these boats are equipped with large ballast bags which fill with water and create a wake up over four to five feet in height and displace thousands of pounds of water. He further stated it's causing considerable damage both to the environment, private property, safety and will give to you which is your concern probably your bottom line, the environmental damage. Mr. Yost stated last year we saw a huge amount of shoreline grasses removed and an increase of turbidity in the water. He further stated these both adversely affect fish and birds, especially in the periods of spawning. He stated the increased turbidity adversely affects the underwater plants and that's what keeps the lake healthy and it also feeds the deeper water species. He stated the damage to the waterfront owners can clearly be seen in those properties, especially those that don't have a retaining wall. He further stated these huge wakes are eroding the shoreline much faster than any other factor, and the shoreline integrity on some lots has already been compromised. He stated they are just not designed to withstand the size, speed and weight to these enhanced wakes. He further stated this constant erosion is reducing the water depth along the shoreline. He stated all of these factors devalue the homeowner's real estate and cause homeowner's additional money to mitigate this damage. He further stated the enhanced wakes also pose a safety hazard on the lake due to their size and weight. He stated they can easily tip over a canoe, paddle boarder, jet skier or fisherman. He knows that there are at least 25 fishermen that are starting up a petition to be able to get them to stop because it's dangerous to them. He stated there have been a couple of guys pitched over sitting on the front of their bass boat, and if you get in the cold weather, somebody can die of hypothermia. He further stated the reason that they're dangerous is they come in at unexpected angles, but not an angle that you would expect on the river, because of the direction of the boat. He stated probably most important for you is because it is eroding the shoreline, it is eventually filling your reservoir, and that's how you make your money selling water. He stated you have an interest in this as opposed to custodian for the environmental factors on the river as well as protecting your bottom line that's here. He stated that homeowners like himself are concerned because of the damage to their property, and it's costing considerable amount of money for some folks that he knows to rebuild their shoreline, so he's done some studying on this and he is going to leave this information with you. He stated he's got several scientific papers which review the effects of boat wash. He further stated there's an article from a waterfront association that's already banned the use of wake enhancement equipment on their Lake. He stated the State of Oregon has banned it on all of their public waterways, specifically wake surfing, but he doesn't think that's fair to pick out a particular sport, it's more the use of these ballast bags and so on. He stated a 22-foot boat is a typical boat with these ballast bags. They carry 6,000 pounds of water ballast so it's about 24 feet weighing over 12,000 pounds. He stated you don't have to be a genius to figure out the wake would be much larger than a 3,000-pound boat. He stated he would leave this with you (an attachment). He stated since he's been here, he has noticed the wake size issue. He further stated you can really tell in the corner of the first bend of the river, since he's been here, that point has probably eroded over 15 feet. He stated it's clear and it's mostly on the side of the river that's on the Chesterfield side, because it's not as developed as on the Dinwiddie side. He stated regardless, it's something that he would request you get ahead of as there's only about a half dozen boats right now. He further stated annoying a small group of people is better than having to deal with a few hundred homeowners and other concerned sporting folks. He stated feel free to pass this information along.

Mr. Smith thanked Mr. Yost for coming and sharing his comments. He stated he will ask Staff to take a look into reviewing that information and provide some feedback back to the Board. He thanked him for sharing his thoughts with us. He asked if there were any other public comments. There were no other public comments so he closed the public comment portion of the meeting.

4. Presentation by HydroLogics on 2018 Chesdin Reservoir Modeling Results (includes Irrigation Withdrawal Impact)

Mr. Smith stated the next item is the presentation of the 2018 Chesdin Reservoir modeling results. He turned it over to Dr. Wichser.

Dr. Wichser stated he would like to introduce Steve Nebiker who is Vice-President of HydroLogics. He further stated the information to be presented is in the Board package.

Mr. Nebiker of HydroLogics gave a presentation on the 2018 Chesdin Reservoir Modeling Results including potential irrigation withdrawal impacts. He stated the Chesdin Reservoir is very reliable at the current system demand levels. 2018 was a wet year, and the intentional drawdown for Hurricane Florence of six inches did not impact water supply reliability. He stated the new DEQ Water Protection Permit for minimum releases added a significant amount of reliability over the old release requirement. He further stated 280 additional irrigation permits (taking 2 MG withdrawal for irrigation weekly during the period Apr-Oct), and including a maximum golf course withdrawal (6 MG withdrawal for golf course irrigation per week during the period Apr-Oct) would have minimal impact on the Chesdin Reservoir raw water supply reliability. He stated under linear demand growth projections, the Reservoir will be able to maintain water supply reliability for the next 50 years.

Mr. Nebiker asked if anyone had any questions.

Dr. Casey stated he appreciated the information and presentation. He thinks those reliability metrics make good generic sense to a lot of people, so that's a good tool we use. He stated he thinks he may have brought this up last year and if not, he apologizes, but it ties a little bit to the Budget, and he thinks sometimes we have a disconnect to just simply using, your metrics are all based upon the last few years on historical average and then drawn the line based upon some methodology to it. He stated again it may be him philosophically, but in Chesterfield County at least, they know what they're going to be consuming for the next year. He further stated it's not equal to what's in the budget, nor is it equal to what might be in your metrics that you're using as a base, we have to submit something and he doesn't know about the others, but he thinks we all have to individually submit something to the State as far as our individual water consumption plans. He stated the State has that information from what we have, but you don't get that information. He further stated he would like to think that he's just one of those people he has to be consistently right or consistently wrong, and he has three different areas where we have different numbers used for something. He stated you're using something based upon certain methodology, the budget's based upon a different methodology, which the rate structures based, he has a different what he thinks consumption methodology by which he's trying to design budgets and report to the State. He stated he just doesn't know how to resolve those three without trying to say we should all just be on the same page. He further stated he would like to think that the five localities in good faith of what they're represented to the State say here's what we're going to be doing, and then why can't that be the base and he just philosophically rests with that.

Mr. Nebiker stated it's an input to the model so whatever demands you agree upon you feed it into the model; that determines reliability.

Dr. Casey stated he thinks the risk is that without you knowing what we're saying, we could trip one of those things into red, and we're going to have a much longer meeting if that occurs, and then if he comes to the table saying well that's what we told the State, ARWA didn't listen. He further stated he didn't want to be in that meeting. He stated it could be pleasant surprises the other way, what you have is yellows and reds in the future, it could be different. He stated he realized they were a big water consumer, but that has an influence into the model. He further stated Chesterfield has five million gallons more of water coming in from the City of Richmond into Chesterfield County. He stated that's going to influence our business of what to pull from ARWA or not or can contribute to, if you see a problem there and problem for the sake of the region, we may be able to turn our dollars in different manners and pull from other sources, their two other sources in a different manner to help out, vice versa. He stated if there's something that's hindering those other two sources, we need to maybe maximize our current contract and pull. He further stated he thinks that's just knowledge that he thinks is a benefit for ARWA, a benefit for the region, because if Chesterfield can help something go from yellow to green or red to yellow to green, he thinks they should be a part of it, not just kind of just a standard. He stated it's no disrespect to you, you're doing what the scope was, but you can then bring values saying yes with Chesterfield doing X, Y, Z, we're good, or we still will have a problem because Chesterfield thinks it needs to pull a higher amount that it did over the last five years. He stated he was just trying to see if that makes sense to his peers, because they want to help and they are helping the State, and the State knows more about what we do than ARWA does.

Mr. Smith stated it would be worthwhile to see that comparison. Mr. Massengill stated with Chesterfield being such a large water user, for some of the other localities it's not going to make a big swing one way or the other, but for you it can make a significant difference. He further stated if you have information reporting to the state of consumption, and I think the intent of doing this, and we go pretty much on an annual basis, is really just a look at our triggers and what not. He stated if consumption is the better method, or maybe it's a show with a straight-line projection to compare the consumption potential as well.

Dr. Casey stated we wouldn't be value added to this equation, and he feels like we're in the audience for what's pulling 70% of the water. He further stated it's just that there's something again that just bothers him about that. He stated they shouldn't be in the audience, you should be meeting with George Hayes and seeing the State Water Report we're doing. He further stated maybe as a due diligence, we should be checking what we individually submit to the State because if you have knowledge, we may be making mistakes. He stated he's not saying what we're saying is this is gold, we think it's right, but if this exercise leads to us submitting a better State Report, he's all for that too. He further stated he just wants to be consistent and bring value where we can, and he feels like we're not, and not being asked to be more important.

Mr. Smith stated we could have Staff take a look based on what we said here, and what the appropriate time for doing that, if it's in the next cycle, or if there's any preliminary modified short reporting they could give us based on using that data in the model they did this year. He further stated if it's a big additional investment then you probably would come back and talk to us first.

Dr. Wichser stated let's talk about this item a little bit. He stated Mr. Nebiker consults across the United States and has been doing this for cities and counties. He further stated it is his understanding, and he's not a water resource engineer, that this is the state of art technology, using real data, and real demands to project out what we know. He asked Mr. Nebiker if he knew from a standpoint of water resource management if there was a better way to do this, or his understanding is Oasis is a state-of-the-art modeling tool. Mr. Nebiker replied the projections aren't from Oasis, and that there's many different ways of doing it. He stated this is a fairly simplistic way of doing it, just taken historic data. Dr. Wichser stated the model is using ARWA's actual demands for 2018, and Mr. Nebiker replied if there's an industry coming in, and Dr. Wichser stated but we don't know that unless we're told. Dr. Casey stated he meant no disrespect but a lot of the localities that do it might have a single point of source water, Chesterfield has three major sources, and so if he told you that they have 5 million gallons more coming from the City of Richmond, that's also called real data. Dr. Wichser stated he didn't know how that was going to impact us since the 2018 actual demand numbers placed into the model are what they are. Mr. Nebiker stated it could go the other way. Dr. Wichser stated that during the next annual modeling run we certainly can get together with Mr. Hayes to determine if he has additional relevant data. He further stated in the development of the proposed Water Service Agreement, we met with various localities numerous times and developed a hypothetical matrix for demands in 2030 and 2040. He stated that's hypothetical, that's not real demands that we're running in the annual demand model update. He further stated he's hesitant in saying let's put these numbers into the model and see what happens as they're so far out from actual demands occurring.

Dr. Casey stated he just thinks it is knowledge sharing and with Prince George interested in other sources potentially you've disclosed that may be future information too that comes into the equation. He further stated he thinks it's just the region trying to put its cards on the table a little bit for the sake of ARWA sometimes. Dr. Wichser stated certainly we can run the model next time differently, we can run it based on actual demands, and then hypothetically put some additional increased demands in and see what that does to the elements that we've set up based on the Water Protection Permit. Mr. Smith stated he thinks it's just getting that data as was suggested and plug that in. Dr. Casey asked if this was an annual required exercise, and Dr. Wichser replied it's not required, we do this based on the Board's request. Dr. Casey stated the State's not making us do this, it's our own individual localities, go through such exercise from the State. He further stated he's just trying to marry the two together if possible. Dr. Wichser stated that's one thing he would suggest to the members is that you continue using something like this to project out in time expected future demands. Dr. Casey stated it's the first column and row that says, here's what I'm starting with. Mr. Nebiker stated they usually want to reconcile what is going to DEQ with what we are sending as well, otherwise, all the confusion, and so it does need to be squared away. Mr. Smith thanked Mr. Nebiker for the presentation.

5. Continued Public Hearing on and consideration of Proposed Amendments Related to the direct Irrigation Withdrawal Policy

Mr. Smith stated that next on the agenda, is a continued Public Hearing and consideration of proposed amendments to the direct Irrigation Withdrawal Policy. He further stated before he opens up the Public Hearing, he would like to ask Staff and Legal Counsel to give a few of the highlights on some of the major changes that were made since the last meeting for the Board and for the public and then we'll open up the public hearing.

Dr. Wichser stated the Resolution in your Board package was public noticed twice, and it was also posted on ARWA's website, and so it was readily available to the public. He stated the Resolution before you, the Second Amended and Restated January 16, 2019 Resolution, was edited based on the last Board meeting that we had and was based on listening to both the Board and the public. He further stated that it allows the present licenses to be renewed for a term to end simultaneously with the expiration of our current Virginia Water Protection Permit on

October 31, 2028. He stated it also ends the moratorium on additional irrigation withdrawal licenses, imposed under the original policy of the First Amended Policy, it also sets a fee for the new license, and it addresses applications for renewals and new licenses. He further stated in Section Three for any current license as of December 31, 2018, shall have a grace period to June 30, 2019 to renew his or her license and may continue direct irrigation withdrawals without any penalty or additional costs until the renewal date. He stated it also states in Section Four that the permit term will end on October 31, 2028 to coincide with the expiration of ARWA's Virginia Water Protection Permit. He further stated Section Six addresses the license fee. He stated we are proposing initially a license fee for this period of \$674. He further stated also in that Section it addresses how the fee can be paid in two different payment installments. He stated most importantly in Section Six is compliance with conservation restrictions. He further stated each licensee must agree to abide by irrigation and other water use restrictions imposed by the participating jurisdiction in which the licensee lives regardless of the level on Lake Chesdin. Dr. Wichser stated for instance, Lake Chesdin could be full, the dam could be overflowing, however, if one of our members such as Chesterfield County goes into voluntary or mandatory water conservation, then those licensees living in Chesterfield County would have to abide by what's issued by Chesterfield County. He further stated Section Eight addresses limitation on number and transferability of licenses, and that's where it addresses taking a large land parcel and subdividing, what's permitted and how it relates to the licensing. He stated Section Nine discusses system limitations and there was really has no change there. It remains that the pump is 20 gallons per minute, and the length of the intake is still 30 feet from normal pool level. He stated Section Fourteen addresses unlicensed direct irrigation withdrawals. It provides for a grace period for anyone that is presently not licensed, which ends on June 30, 2019. He further stated other water withdrawals are addressed in Section Fifteen, and this Section also addresses fire departments being allowed to draw off the lake with their pumpers in an emergency or any other federal, state or local organization. He stated enforcement is addressed in Section Sixteen. Section Seventeen addresses golf course irrigation stating that the Executive Director should periodically review the agreement with the Lake Chesdin Golf Course.

Mr. Anderson stated he really didn't have anything to add to that but he would be happy to answer any questions.

Mr. Smith stated before moving into Board discussion, he would like to open up the Public Hearing for the public to comment on the proposed Irrigation Withdrawal Policy. There is a three-minute period for public comment and feel free to come up to the podium, if you'd like to make comments to the Board at this time. The Public Hearing was opened at 3:43 p.m.

A resident stated he didn't have a comment, he just wanted to make sure he interpreted this correctly. He is a current license holder and asked, does he need to fill out a new application. Dr. Wichser answered yes; he would need to submit a new application. The resident asked where to get that from and Dr. Wichser stated that ARWA would post the information electronically once the Board approves the Resolution, and that ARWA does have the license application and the license agreement already written and ready to go, and that will also be posted on our website. Ms. Wilkins stated we would also have hard copies here at ARWA to distribute to the public if interested. The resident further stated if he's reading this correctly that you need \$337 by June 30, and then \$337 by June 30, 2024. Dr. Wichser stated the fee is at the Board's discretion, and if they accept this as written, then that is correct. Mr. Smith asked him to state his name for the record. He stated his name is Dave Lumsden, who lives in the Eagle Code Subdivision at 20219 Eagle Cove Court. Mr. Lumsden stated he moved here in 2012, and current leadership is doing a heck of a job compared to the way things were when they first moved here so thank you.

The next resident stated he was afraid to say anything because the last time when he appealed his assessment, they raised it so he's afraid to say anything. He stated his name is Lowell Thomason and he lives at 20222 Talen Point Drive in Eagle Cove. He stated his only comment is that the only reason we are here is the fact that we had a Director here a few years ago who did not know what he was doing, but they pay enough taxes to offset this fee. He further stated we probably pay ten times on a waterfront lot and that the first meeting that we had when this thing came up, he did a little research. He stated he has six acres on the lake, not all waterfront and a neighbor friend of his, had seventeen acres with an assessment of \$112,000, and Mr. Thomason's was \$400,000 for six acres, so he thinks he is paying enough to pump this water. That's the only amenity he knows of that they get for waterfront property. He would just like for you to consider that we don't have to pay this, and he can afford it but he just doesn't think it's fair.

Mr. Smith thanked him for his comments and asked if any other comments from the public. As there were no other comments the public hearing was closed at 3:47 p.m. He opened it up for discussion on this topic.

He asked if any comments or questions from Board members.

Mr. Lyons asked if this required a unanimous vote and Mr. Anderson answered no.

Dr. Casey stated he wanted to thank the residents for coming out. He can't speak to individual assessments there are lots of provisions and processes for that, but he would be glad to sit down with you with the assessor so he can even understand the changes in valuation of this property versus that. He further stated lots of things influence the value, and this is not that meeting, but let's have that conversation another day. He stated he does think and hope that since there's the public here, that we try as a Board to take what we had before and try to make it better. He further stated we were making people come back every five years, we were only saying those that happened to be here a certain date many years ago, they're the only ones that could qualify. He stated we had two neighbors one was able to pull and one wasn't, and so now again to the degree that you touch the water. He further stated he's glad that HydroLogics was here and you all saw that, so when people ask why are more people able to take water, it's because it's the people's water and we have water for the people. He stated the charge was just a recognition, it's a nominal amount. He further stated if you were getting it at the other direction through a public water system, it would be more so it's a discounted factor. He stated what is the right number or not, whether the tax rate's the right tax rate or not are philosophical questions for the people to decide and help influence elected officials who influence people like himself. He stated he thought we just tried to pick a number that we thought was good. He didn't think we even pushed it to the full extent of an inflationary change that existed when we first started with that, so we're trying not to turn that dial up because we can turn it up, but you're trying to keep that about the same and just make it less of a burden. He stated in ten years from now, hopefully, we can look at it again, and see what that dollar should be up, down or different, so we can pay attention to it. He further stated we also don't want to wear you all down and have anxiety and people worrying about, if they are going to be able to pull in the future. He stated he does want to talk to you outside of this meeting about some other things, and maybe where some of your other taxes do go to.

Mr. Smith stated while there are obviously the charges continuing some of the relevant points like you were touching on the extended time frame, now it's ten years. He further stated it's also offering opportunity for additional people to have that opportunity that did not have it before.

Mr. Massengill stated he wanted to thank Mr. Anderson and Staff and the public too, who hung in there with us to get to the point that we're getting today. He further stated one of the biggest issues, he's met with you before, the balance between payment and whether you pay or don't pay. He stated he appreciated Dr. Casey wanting to meet with you, and talk about assessments and other things, as he lived through it the first time. He knows how much you pay in taxes and on the Dinwiddie side how much the waterfront property is valued. He stated really just a conundrum of, on one side, you're paying more and you feel like this was one of the assets that you get. He further stated the other side is a lot of people that don't live on water and they look at it from the perspective and, back even when we had this committee, they really felt like the waterfront folks should pay the same thing that they have to pay. He stated his concern back then was with that was the reliability of it. People who don't live on the water and actually you're just getting this, maybe have well and septic, and they're using this for irrigation purposes. He further stated its irrigation water, it's not drinking water, and when the lake drops your pump is out of the water, you're high and dry so you don't have that reliability to continue to pump. He stated he thinks the idea of keeping this fee where it is, which is basically just under six bucks a month is maybe striking that balance. He further stated he wouldn't want to be in a situation where you know, some of our friends in Petersburg, Prince George and Colonial Heights that don't have the waterfront property, if those folks would come back and ask how come they get it completely for free, at some nominal amount is at least a gesture that it's not absolutely free. He stated he respected the way residents feel about this and feel it will be a good conversation with Dr. Casey.

Mr. Lyons stated that is the perfect segue as to why he asked the question about a unanimous vote. He further stated the reality of it is, compliments to the Staff and all due diligence that has gone on to get to where we are. He deals with the reality of it, of a City Manager in a city that's struggling in a lot of different areas, and you hit it very much on the head. He stated he is tired today because of last night and earlier today about water bills, water rates, and all the other things that are going on and trying to articulate half of the morning to individuals that we're having to do massive cut offs because we've got close to 1,600 people, who are more than 120 days beyond paying their water bills. He further stated several of them showed up in his office today, and there is nothing he can do to even keep from cutting the water off. He stated that leads him to say he's not in opposition to this, and thinks everything that has been done has been done right. He further stated where the Board goes to vote and he hope the vote goes to endorse this, but he will not be able to endorse it largely because at the end of the day he represents the people of Petersburg, he doesn't represent himself, and he knows at the end of the day these things right or wrong go back to a community that we voted for this, leads City Managers and folks like him to look for another job in another town, and he's trying to hold on to it as long as he can, so he is not in opposition to this, it's just that he cannot vote for this in light of all of the factors that are prevailing over Petersburg and their water system and rates and things of this nature. He stated he commends the tremendous amount of work, and he commends the persistence of the citizens in the neighborhood of asking to be done right. He further stated he thinks in this process, you all have done right by them, but he will not be able to vote for this.

Mr. Smith stated he appreciated the comments on this. He asked if there were any other questions or comments from Board members or Staff and there were none.

Mr. Smith asked for a motion to approve the Amended and Restated Policy pertaining to direct irrigation withdrawals from Lake Chesdin.

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

RESOLVED, that the Board approves the Amended and Restated Policy pertaining to direct irrigation withdrawals from Lake Chesdin:

For: 4 Against: 1 (Lyons) Abstain: 0

Mr. Smith thanked Mr. Anderson and Staff for all their hard work, as well as the public participation and involvement in bringing this forward.

6. Executive Director's Report:

- **Reservoir Status Update for December/January 2018/19**

Dr. Wichser reported on the reservoir status update for December and January. He stated with the rain we've been having and the snow, the reservoir has been full and overflowing. He further stated this morning, we have eight and a half inches going over the dam. He stated the hydro plant has been running about 90% of the time, and today the hydro plant's taking 646 million gallons to produce electricity, our cone valve is also open. He further stated by opening our cone valve, what we're able to do is draw some water off the reservoir bottom, so the water chemistry is a little bit better for our raw water pump station intake. He stated to give you an idea we're producing on a daily average between 24 MGD and 26 MGD. He further stated yesterday we had over 1,000 million gallons entering the reservoir and at Matoaca we had over 1,517 million gallons flow, so there's a lot of water flowing through the reservoir. He stated it's interesting to see that turbidities are up a little bit, so we are using more chemicals to treat the raw water. He stated we've been meeting all Health Department and DEQ permit requirements, so everything is good. He asked if there were any questions on the reservoir status, and there were none.

- **Annual Flushing Notice**

Dr. Wichser stated the next item he'd like to bring to the Board's attention is the annual flushing notice. He reported that ARWA schedules this item annually, and most of you have reviewed the notice before, and the narrative remains the same. He stated the water main flushing program will occur during the fourth week of March 26 through March 29, 2019. He further stated if we have a storm, we will push it back to the week of April 2nd. He stated we will notify your utilities directly to make sure that your ground tanks and elevated tanks are full, and if there are any issues, we're able to immediately stop flushing, if there's a major fire or pipeline break or something of that nature. He further stated this was a For Your Information only, and we do want to release this Notice on February 28, 2019 to the press. He asked if there were any questions on the annual flushing, and there were none.

- **Presentation by Golder Associates on Chesdin Reservoir Hydrilla Survey**

Mr. Ashcraft left at 3:57 p.m. and Mr. Haltom took over for Prince George.

Dr. Wichser stated the next item is a presentation by Golder Associates on the Chesdin Reservoir Hydrilla Study. He introduced Peter Nash, who is a Senior Hydrogeologist with Golder Associates. Dr. Wichser stated we had put in front of Mr. Nash's presentation a summary document in your Board package in order to provide you a bit of introduction information on Hydrilla. He further stated hydrilla is an invasive plant species from Florida. He stated in the summary, you will find information on Hydrilla and ARWA's approach. He further stated he wanted to thank Chesterfield County as we met with Chesterfield in November, along with meeting with Virginia Game and Inland Fisheries to discuss Hydrilla existing control programs and options on what ARWA can take.

Mr. Nash gave a presentation on Chesdin Reservoir Hydrilla Survey.

Mr. Lyons asked Mr. Nash who develops the management plan and asked if we had one. He stated he is going back to where you pick up the hydrilla, and asked if they removed any of that. Mr. Nash stated not at this stage, and he believes they bagged what they picked up. He further stated the hydrilla floating down the stream, he thinks they removed what they disturbed. Dr. Wichser stated this reservoir was formed in 1967, and this is the first time a hydrilla assessment has ever been conducted. He further stated if you look at the summary, he provided you before Mr. Nash's presentation, at the bottom you'll see some bullets where we state ARWA's present approach. He stated ARWA has conducted meetings as he stated with the Virginia Game and Inland Fisheries and Chesterfield County, who is ultimately familiar with this problem plant. He stated what he suggests we presently do, is listen to what Mr. Nash is saying, and then ARWA needs to make a decision on moving forward at the height of the plant's growing period and conduct an additional survey on Hydrilla. He further stated Mr. Nash mentioned that due to wet weather events that turbidity could be increasing in the reservoir so growth could be lessened. He stated we'll figure out what we're going to do next summer, but we're suggesting we continue to monitor the extent of hydrilla establishment in the Chesdin Reservoir at a minimum on a three-year recurring timeframe based on the results of the second hydrilla inventory. He stated the Authority will consider taking no action versus implementation of a publicly acceptable hydrilla control program. He further stated that hydrilla throughout the United States can be controlled various ways, such as the use of aquatic herbicides, use of cutting, raking and pulling, use of a no action approach, or you can try to control this plant by use of sterile grass carp. He stated these are carp that have been sterilized that feed on hydrilla. He further stated these are the type of control program options we have to consider looking forward. He stated presently the Authority does not have a management plan; however, there is no doubt that we have the invasive species growing in our coves. Dr. Wichser referred to one picture that shows the length of the reservoir. He stated when you look at the reservoir, what we could have working in favor for us is that the reservoir is a riverine system that's been dammed up. He further stated we also think that hydraulics of the reservoir is actually benefiting the Authority. He stated that during high flow events, we have observed floating Hydrilla segments broken off and large amounts of hydrilla going over the dam. He further stated hydrilla can't establish itself in the reservoir bottom substrate that's actively being flushed by high velocity wet weather events, but it certainly is establishing itself in the protected cove areas where there's a lot of sediment. The way it establishes itself is interesting, as it essentially sends down root nodules and forms what are called tubers in sediment. He stated that the tubers are very difficult to kill and remove. He further stated that any management plan developed has to address how you go about controlling this invasive species; can you control it, since you can't eradicate it, that's a given. He stated we've looked at information from Florida, South Carolina, North Carolina, New Jersey, New York and Virginia. He further stated we've been told by the experts that it can't be eradicated. It's more of a long-term management control program. He stated we've had citizens call the Authority about this issue. He further stated over the last couple years, we've had issues where the growth of the plant had gotten so thick, and in some of the coves, citizens were concerned with getting their boats out. Dr. Wichser stated we've gone in and actually treated in very small areas using a chemical that's acceptable to water utilities. He further stated the premise he's going on as we move forward is to continue to monitor this invasive species, then develop an acceptable long-term management plan based on what we're finding using sound technical information while protecting public health.

Mr. Haltom stated we know this is a nuisance for recreational activity, what's the issue as it is associated with the Authority itself in the treatment, and Dr. Wichser replied what happens is in the fall, when the light attenuation starts and the weather gets cold, the plant dies off, and as the die off occurs, the plant degrades and this produces organic products potentially impacting the treatability of the water. He stated there are organics such as tannins that could potentially impact the quality of our drinking water or make it more difficult to treat. Mr. Gordon stated the die off can affect the dissolved oxygen in the water, which can cause increases in certain metals such as manganese, which can increase our chemical treatment needs.

He further stated as far as the reservoir, he didn't think there was enough to really necessarily bind up and take up too much of the volume because it is like we said, these small coves are usually what's impacted, then it drops off fairly quickly into a channel. Dr. Wichser stated as Mr. Gordon said as it dies off it degrades, it's using up dissolved oxygen in the lower parts of the reservoir, and this provides for the potential release of manganese and iron that then has the potential to impact taste and appearance in the final drinking water product. He further stated that issue can then make the raw water more expensive to treat.

Mr. Haltom asked if the treatment of the Hydrilla cause any issues with the treatment of the water. Mr. Gordon answered no and stated we've gone after spots of hydrilla, and the chemical we're using you can't get it strong enough to treat the whole reservoir. He stated we've looked at some of the other chemicals and their issues in a water utility, and in a drinking water reservoir we need to be very careful.

Dr. Casey stated picking up on that, he's sensitive to whatever chemicals are being deployed, know what the standards are, and be far away from their standards. He further stated copper sulfate is an example of what may be used for spot treatments. He stated he's not a big fan of copper sulfate and reservoirs, it just doesn't sound like the right ingredient to mix

with water and fish that people catch. He further stated he thinks we need to be apprised of what are the actual chemicals being used, what are the actual standards and how are we far away from whatever the thresholds are not just water quality, but also fish and Dr. Wichser added human health. Dr. Casey stated Dr. Wichser mentioned that it might be good to come back during the growing season, and he thinks November was mentioned, and looks like when the person took the picture raking, it was a cool, cold day. He stated from Chesterfield's perspective Swift Creek Reservoir has hydrilla issues that are monitored, and he thinks carp may be the primary thing they did. He stated he realized its different water sources, different water capacities; carp for whatever reason our logic, works best for Swift Creek, and doesn't know if it would work here or not. He further stated it seems like we should have done this exercise during the growing season. He stated all the metrics all the pictures you have and sonars would not be of the dying plant but the plant in full bloom. He stated he wondered why they picked November as the testing period for all this knowledge, when August may have been the better period. Mr. Nash stated it had to get done by the end of the year and the earliest they could get to schedule it was November. Dr. Casey stated he would say wait until August if you know yourself that the November results have an asterisk and you say you've got to come back and do it again. He stated he would have said wait until the following August. Dr. Wichser stated he didn't want to wait as we had the hurricanes hit us and that impacted everything. Mr. Nash stated hydrilla is still growing at that time of the year, but he thinks one of the major issues is probably turbidity increases related to the hurricanes.

Dr. Casey stated his only final comment is he doesn't know what ARWA learned from Swift Creek's relationship with the residents, fishermen, boaters. There's lots of best practices out there and how there's some accountability to those that utilize Swift Creek to mitigate what could give rise to Hydrilla or other contaminants or other species, invasive species that may enter it. He further stated it could be washing the boats or some activities that he thinks people were looking for homework assignments of how to help out something and if we're silent we are not helping the people be involved in the homework assignment. He stated he didn't know if Mr. Hayes wanted to say anything now or if that's just a future meeting, but he thinks there's knowledge to be shared about Hydrilla because right or wrong we're faced with it in inordinate proportions certain times of the year. Mr. Nash stated he knew it was highly variable from year to year as well. He thinks you should look at what's happening over a couple of years and then develop a plan based on what's done nearby geographically as well as Lake Chesdin.

Mr. Haltom stated based on what we've seen so far, how quickly can this spread and become a large-scale issue, and Dr. Wichser replied what we think is happening, based on shape of the reservoir that during high flow events seen in November, December, January, February, March the growth of Hydrilla in the main channel stem is retarded. He further stated there appears to be also a natural control of the plant probably occurring due to the wash out during storm events so it cannot establish itself in the main channel throughout the reservoir. He stated he thinks what's presently warranted is continuing to review Hydrilla locations and watch what happens and consider conducting additional surveys. He further stated that Dr. Casey mentioned that Chesterfield is very knowledgeable. Dr. Wichser stated in 2008 he worked with the then Director of Chesterfield Utilities, and we copied what Chesterfield was doing with the grass carps at other reservoirs in western Virginia, and we were very successful in controlling Hydrilla. He stated he is very familiar with the technology, the consultants and the reports, and will certainly keep actively discussing hydrilla. He further stated he thinks the toughest part with hydrilla is incorporating control technology or management technology that is acceptable from a human health and environmental standpoint in concert with the public, particularly fishermen and also swimmers. He stated he's sure you've gone through this, Mr. Hayes, in trying to make everyone happy with the program, and that's the most difficult thing with Hydrilla, getting a publicly approved management control program. He further stated that's something we're probably going to face in the next four or five years.

Mr. Nash stated he believed the first time it was found was in 2010 and asked Dr. Wichser if that was right and Dr. Wichser replied he wasn't here then. Mr. Gordon stated he wasn't sure but he knew we had had some invasive species over time, we've had some Brazilian Elodea, and some parrot feather and those are the things we spot treated successfully. He further stated last year we went to Virginia State and that's when we first confirmed that Hydrilla was here, but it was suspected since we had gotten calls earlier. He stated when we got there, there were some native species that looked like it, but this is the first time we actually confirmed that it was Hydrilla, but not to say it wasn't here several years ago. Dr. Wichser stated for the Board's takeaway this is our first survey, and we will consider going back at the height of the plant's growth period, and then what we need to do with development of a management plan. He further stated it's something he didn't want to sit, and wanted to move on this matter, and that's why we moved forward.

- **Work Plan Summary/Update: January 1, 2019 to June 30, 2019**

Dr. Wichser stated the next item is the Work Plan Summary/Update the Board requested which is similar to South Central Wastewater. He further stated for January 1, 2019 to June 30, 2019 the purpose is a little different than South Central's, but still very similar in some ways since the plan is to ensure ongoing reliable service to Authority members where our

overarching goal is to expand as needed, operate and maintain the water system in an efficient and economical manner, and consistently providing for quality business, engineering and operating practices. He stated our goal, one hundred percent of the time, is to provide safe, reliable drinking water to you, our customers, our members. He stated on capital projects that Mr. Gordon is going to go over that topic in the status update. He further stated primarily the in-plant capital project is the main project continuing to occur and for Administration's main task we have going on the budget process is under way. He stated one very important item we are presently working on related to our VPDES permit, is groundwater monitoring, and actually Mr. Nash of Golder is helping us on that item also as a hydrogeologist. He stated we talked a little bit about the facility instrumentation and SCADA, facility process chemicals and then ongoing Department goals in the update. He asked if there were any questions and there were none.

- **Presentation of Proposed FY 2019/20 Operating Budget**

Dr. Wichser reported on the Proposed FY 2019/20 Operating Budget. He stated that the memorandum format is somewhat similar to what was presented at the South Central meeting. He stated we are required to hold a public hearing, including two public newspaper advertisements required fourteen days in advance of the schedule public hearing on March 21st. He further stated Board requested changes to the proposed Budget can be made on or before May 16, when the Board is requested to approve the final budget. He stated cost items increasing are hospitalization insurance at \$90,000, and also contractual services mainly due to transferring the reservoir studies and reservoir invasive control program to the O&M from the Replacement Fund. He stated that transfer was based on our accountant's recommendation. He further stated electricity for pumping is expected to increase \$25,000, and repair and maintenance increases \$25,000. He stated items that are reducing are consulting services, small equipment purchases, and equipment parts. The bond debt service will be covered from the base rate, which includes the 2012 and 2017 bonds. He further stated we expect the overall interest and principal payments for 2020 to be \$2.1 million and the In-Plant project alone to be \$1.1 million of the \$2.1 million. He stated the reserve fund will be covered from the base rate, and is funded at \$188,750, increasing just over \$19,000. He further stated salary and wages are very similar to what you heard with South Central and the cost is minimal as Ms. Wilkins stated. He stated the Replacement Fund is being decreased \$16,000. He further stated that's everything included from required modem upgrades to replacement of aged vehicles, two forklifts, critical valve replacements, including the upgrade to the Prince George meter vault. He stated we also plan to upgrade the Matoaca meter vault. He further stated in the rate comparison section where FY2018-2019 versus proposed FY2019-2020 is shown, along with the proposed percent rate difference and dollar difference. Dr. Wichser stated no budget action approval is needed at this time by the Board. He further stated we do request approval to advertise the proposed budget and for the public hearing which will occur on March 21, 2019. Final Board approval will be at the May 16, 2019 Board meeting.

Dr. Wichser stated budget specific line items are presented next if you want to peruse specific line items, and also the reason for the change for increases or decreases, all the way to the end of the proposed budget document where it shows the cost of the debt issues and the reserve fund. He further stated you'll also find a copy of the replacement fund budget, the construction fund with our capital improvements out to 2023-2024. He stated the \$2.5M for a capital carbon project would be driven by federal or state regulatory requirements.

Mr. Smith asked if any questions.

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

RESOLVED, that the Board authorize the Executive Director to advertise the budget:

For: 5 Against: 0 Abstain: 0

Mr. Smith asked if any questions for Staff at this time.

Dr. Casey stated he was not going to be redundant, so whatever he said for the South Central meeting, just copy that over into this on the capital reserve fund utilizing locality-based information for consumption and merits aligned with localities.

At the earlier January 16, 2019 South Central Wastewater Authority meeting, Dr. Casey stated he liked the Capital Reserve Account philosophy, and so forth, and again just at some point and it doesn't actually have to be today, but it would be good to understand what's the Board's role in defining the methodologies behind it, there's some financial policy that's Board adopted or Board considered. He further stated if one thing is good for South Central, what's the relevance and what can be borrowed for ARWA as well, or vice versa, so that it's just easier for him to remember what is good fiscal practices between an Authority rather than saying this is good for South Central and this is good for ARWA, unless something

dictates them to be a differential in wording, if that makes sense. He stated that could be a future discussion as we go through what might be Board owned policies versus staff driven. He further stated his only observation is with the public budget and the public information that's there is the three percent to the four percent merit increase that always gets concern and attention when we have Authorities that we're a party to and a part of that have different merit philosophies than what at least what Chesterfield may be doing for its own workforce. He further stated that he thinks sometimes if you want to have a placeholder in there, that's kind of riding the tide if you will of localities of what we think it is, and he does not know if anyone from your staff has called out to Chesterfield, or called the other four localities to get a perspective where they stand and knowing of the environments they're in, the markets they're in, for and what they are thinking of giving their employees so at least hand in glove what they may end up with adopting, if there's something they're going past where you are, then if there's a reserve to consider that's also being hand in glove after the fact, but it's always kind of awkward. He stated this is not just for this Authority, it's for others that also have to start their budget processes before we start ours, so that we know how to embed that commitment into them, so it's that awkward timing anyhow, but he can tell you he doesn't think they have had the discussion at all about a four percent merit, and he knows he's going to get questions from employees and morale issues and distractions about that, especially if it's rate payers at the end of the day and Chesterfield paying for it.

Dr. Casey stated the only other thing specific to ARWA is, and he appreciates you trying, he knows in the fall we kind of pivoted a little bit as far as rates and what our consumptions were to have that discussion. He stated from a transparency perspective, he thinks we need to illustrate that budget and to management of rates when you break it down locality by locality, because you have to footnote in the table is that the FY 2019 rates that are being illustrated were not the adopted rates initially a year or so ago, they were the revised rates. He stated they went into their budgets and our exercise disclosing what those rates were, and he doesn't want to create confusion to our users our information when we see our rate change budget to budget being different. We needed to do that for ourselves to make sure we're going to position ourselves physically well. He stated your rates and percent changes would be different than what they were showing. He stated this is his consistency speech that he gave before and this can be copied and pasted.

Dr. Wichser stated when we advertise our budget, we actually state that in the advertisement in the newspapers. Dr. Casey stated maybe he just didn't pick up on it, and all he saw was the percent change of the modified rates to the proposed base. He further stated he needed that apples to apples so it equals what Mr. Hayes asks of us.

Mr. Smith stated there was a motion on the floor for approving the public notice. He asked All in Favor? Mr. Smith stated it passes unanimously.

For: 5 Against: 0 Abstain: 0

- **Presentation/Approval of Additional In-Plant 2017 Bond Funded Projects**

Dr. Wichser stated the next item is the In-Plant Additional Projects that we're proposing for Board approval to apply to the remaining 2017 bond funds. He further stated as you all are aware, the bid on this project came in providing for the remaining \$2.2 million from the December 2017 bond fund to be considered towards additional In-Plant projects. He stated the Board at that time asked the Staff to consider what additional projects could be prioritized, and we discussed this with your Engineering Directors at our November meeting. He further stated all In-Plant improvements are defined specifically in the bond documents, and I quote, "related to maintenance and improvements of ARWA's water treatment distribution system, including finished water system improvements and raw water system improvements". The bond document actually has a statement that it would like proceeds to be expended in full by December 31, 2020 and Mr. Anderson stated that is to establish the ability to invest the sale proceeds of the bonds at an unrestricted yield. He further stated if you go beyond the three-year anniversary date, your penalty is that you will yield restrict those monies, which may become a reality as we go forward, and rates continue to go up, but he recommends trying to hit that target if you can, but it's not like you're automatically going to suffer a penalty.

Dr. Wichser further stated we've developed the projects in three tiers. He stated what we're asking the Board to do is approve ARWA moving forward using the additional money for these projects. He further stated these are planning level costs estimates. He stated at the planning level, we can be talking plus or minus 25% to 35%, so the first tier of projects are process equipment and energy conservation. The second tier are programmable logic controllers and software upgrades. Then there are the miscellaneous facility improvements, which would be the facility improvements that we would continue on if the bids and the work came in at the acceptable number. Dr. Wichser stated the total additional projects are estimated at \$2.08 million, which leaves about \$154,000 in reserve, and again, we would use the miscellaneous facilities to meet the budget on the top two tiers if we had to. He asked if there were any questions on what is being proposed. He stated if

none, he asked the Board to approve the additional projects. Dr. Casey stated, what is the philosophy for these projects that are now being moved forward; if they were not here, they would otherwise be the next projects in our CIP or some other rationale like that. Dr. Wichser stated into the CIP or replacement fund, that is correct. He further stated we listened to the Board, then we moved projects up, we prioritized with the goal of providing reliable, safe drinking water, and what we needed in order to continue to provide that mode of service.

Mr. Smith asked if there were any other questions from Board members. He stated he wanted to be sure that all these are meeting that criteria, including when we get down to those facility improvements that they're within that bucket that meets what we needed to be doing. Dr. Wichser replied they're all meeting in the fence project requirements.

Mr. Smith stated as there are no other questions, he'll ask for a motion for the Board to authorize approval of the recommended projects for 2017 Bond In-Plant list as presented by Staff in the Board packet for the goal of completion by December 31, 2020,

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

RESOLVED, that the Board authorizes approval of the recommended projects for 2017 Bond In-Plant list as presented by Staff in the Board packet for the goal of completion by December 31, 2020:

For: 5 Against: 0 Abstain: 0

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

Mr. Gordon gave an update on the Status Report of Ongoing Projects/Operations/Financials. He stated for the ongoing projects as Dr. Wichser stated, the In-Plant Capital project is the main project going on right now. He further stated construction is ongoing and is predominantly at the raw water pump station. The contractor is also working on the electrical systems in finished water pump station one along with the new emergency generator pad. During the first week of January the generator pad was completed. He stated we held a construction meeting on January 3, and the next one is scheduled for the 31st of January. He further stated we encouraged the contractor to focus on the water valve replacement schedule, so that would allow us to switch out our pumps more easily with less interruption. He stated they are actually in the process of doing that. We shut down one of the raw water pump stations, and they're presently swapping out the valves, and next week they're going to do the finished water pump station, and that's been going pretty smoothly. He further stated we don't expect any more issues, and shouldn't be any impact to any of our members for flow. We have the second pump stations as back-up that are in good operation. He stated wet-weather has impacted some of the excavation operations, but they're still moving forward.

Mr. Gordon stated as far as for the operating and financial report, again a reminder the next scheduled Board meeting is March 21, 2019 at South Central Wastewater Authority at 2:00 p.m. He further stated we have received the annual maintenance inspection report from our Trust Engineer, and we had the Hydrilla survey completed, and W-2s have been distributed to all employees. He stated as Dr. Wichser mentioned we opened chemical bids. He further stated there are some increases and some decreases in costs, but for the most part there's a slight increase maybe three percent overall. He stated one chemical we are going to have to rebid because of the availability, we didn't get as many bids as we liked, so we're going to go back out for that one.

Mr. Gordon stated for operations, finished water met all the permit requirements for 2018. He further stated we did have a State Health Department inspection on December 19, 2018, and there were no issues with that and we're currently scheduling our Calgon carbon cap change out on our filters, and we're actually coordinating that with some of the construction because they'll be in the same area, and we're just trying to make sure that both are notified and know what's going on.

Mr. Gordon stated as far as for maintenance work, we're checking out one of our raw pumps, and transmission air release valves are ongoing, replacing a chemical line, and we're in the process of putting up a new fence on the Dinwiddie Dam side for security, which was one thing they did go over and inspect during the annual maintenance inspection, and that item needed some upgrade.

Mr. Gordon stated as far as instrumentation, we're investigating the alum feed pump flow meters, and he thinks we have that resolved. He further stated we've scheduled the upgrade for the electronics and the heaters for the existing raw water generator. He stated we're upgrading the generator up at the dam that is going to stay; we're just putting the latest

communication equipment in and a coolant circulation pump. He further stated what we presently have is an older communication system on this generator and this action will aid in the communication with the new generator.

Mr. Gordon stated as far as the laboratory, the Consumer Confidence Report (CCR) development is ongoing and the groundwater monitoring plan with the assistance of Golder is ongoing. He further stated related to the CCR, we hope to have it out by the end of the month to the Virginia Department of Health (VDH for review), and if we get approval from VDH, we will send it to our member localities, so they can develop their required CCR. He stated the financial status report is included for your review. He further stated if anybody has any questions, we'd be happy to address any of those.

7. Items from Counsel

Mr. Smith asked if there were any items from Counsel and Mr. Anderson replied no.

8. Closed Session

Mr. Smith asked Mr. Anderson if there were any Closed Session items and he replied no.

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

- **Internal Audit Subcommittee Update**

Mr. Smith stated we do have an item listed here as an update from the Internal Audit Subcommittee. He stated he and Mr. Massengill met earlier today as the Internal Audit Subcommittee. He further stated we are conducting publicly posted meetings and this was our second meeting. He stated we had received an Internal Audit Engagement letter from Mr. Akers with the Chesterfield Internal Audit Department. He further stated he and Mr. Massengill discussed the letter content. He stated there is one addition they are going to request, and once that's finalized, we'll send it out to the whole Board. He stated this was just to have one item that would be a specific inclusion that this review would be included, the method of billing for these specific items that generated the audit task initially, the 2012-2017 Bond funding, the debt service reserve, the In-Plant engineering, and so on, four different categories. He further stated that would include comparing with bond documents and or Board policy, reviewing calculations for cost allocation, and true-up options. He stated, then those options would be for discussion by the Board, in addition to the other items that they had already listed. He further stated we'll work with them on just getting that revised slightly. He stated according to the document that they had sent to us earlier this month, it was looking like a couple months, the time period is what they were referencing in here. He stated, we'll be just getting scheduling information from them and pass that along as relevant. He further stated Staff also received a request for documentation, and they'll be working on getting that documentation sent back to the Chesterfield County Internal Audit Team.

Mr. Smith asked if any other items from Board members/Staff not on the agenda and there was none.

Mr. Smith thanked Staff for coordinating and getting the recognition together for Mr. Ashcraft.

10. Adjourn

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

Upon a motion made by Mr. Massengill and seconded by Mr. Haltom the meeting was adjourned at 4:53 p.m.

MINUTES APPROVED BY:

George Hayes, Secretary/Treasurer

RESOLUTION

WHEREAS, in November 2016, Mr. Percy C. Ashcraft was appointed as a Board Member for both the Appomattox River Water Authority and the South Central Wastewater Authority and served two years, and;

WHEREAS, Mr. Ashcraft served as Chairman of the Appomattox River Water Authority Board of Directors and as Chairman of the South Central Wastewater Authority Board of Directors, and;

WHEREAS, Mr. Ashcraft frequently provided both administrative and policy related recommendations and comments, and;

WHEREAS, Mr. Ashcraft's dedication to the fields of Water Resource Management and Wastewater Treatment, and;

WHEREAS, the Boards of Directors wishes to recognize Mr. Ashcraft's years of service and dedication to both Authorities;

THEREFORE, BE IT RESOLVED, that the Board of Directors of the Appomattox River Water Authority and the South Central Wastewater Authority, by unanimous vote this 17th day of January, 2019, hereby recognizes and commends Mr. Ashcraft on his service and wishes him well in his future endeavors;

BE IT FURTHER RESOLVED, that a copy of this RESOLUTION be incorporated into the Minutes of the Boards of the Appomattox River Water Authority and South Central Wastewater Authority and a copy be presented to him.

*Appomattox River Water Authority & South Central Wastewater
Authority*

Board of Directors

Dr. Joseph Casey, Chesterfield

W. Kevin Massengill, Dinwiddie

Douglas Smith, Colonial Heights

Aretha Ferrell-Benavides, Petersburg

Robert W. Wilson, Dinwiddie

George Hayes, Chesterfield

3. Public Comment and Public Hearing on Proposed FY 2019/2020 Budget

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.

APPOMATTOX RIVER WATER AUTHORITY
PROPOSED BUDGET AND ESTIMATED RATES FOR THE FISCAL YEAR ENDING JUNE 30, 2020

Notice is hereby given that the Board of the Appomattox River Water Authority (the "Authority") will hold a public hearing for informative and fiscal planning purposes to consider the following proposed budget and the estimated rates for the fiscal year ending June 30, 2020 ("FY2020"). The public hearing allows the public to question and comment on the proposed budget and estimated rates.

The meeting, which may be continued or adjourned, will be held at 2:00 o'clock p.m. on March 21, 2019, before the Board, in the South Central Wastewater Authority Board Room, at 900 Magazine Road, in Petersburg, Virginia. Any person interested may appear at the meeting and present their views. Information regarding the proposed budget and estimated rates is on file and is open for inspection at the Appomattox River Water Authority's office at 21300 Chesdin Road, South Chesterfield, Virginia, during business hours.

PROPOSED BUDGET

REVENUES

Chesterfield County	\$7,275,022
City of Colonial Heights	622,663
Dinwiddie County	608,154
City of Petersburg	1,689,919
Prince George County	346,867
<u>Interest & Miscellaneous Income</u>	<u>30,000</u>
TOTAL REVENUES	\$10,572,625

EXPENSES

Operating and Maintenance Expenses

Salaries & Wages.....	\$1,700,000
Employee Benefits	747,600
Contractual Services.....	1,204,500
Other Charges (Utilities, Insurance, Fuel, Training)	1,051,600
Materials & Supplies	2,771,000
Debt Service	2,141,175
Reserve Policy.....	188,750
<u>Replacement Fund Expenditures</u>	<u>768,000</u>
TOTAL EXPENSES	\$10,572,625

Pursuant to the water service agreement in effect between the Authority and each of its five participating jurisdictions, the proposed budget set forth above will result in an estimated rate per 1000 gallons of finished water purchased during FY2020 by each of the participating jurisdictions as set forth below:

	RATES (cents/1,000 gallons)		
	FY2019 ⁽¹⁾	FY2020	% Difference
Chesterfield County	0.9637	0.9797	1.66%
City of Colonial Heights	0.9878	1.0083	2.08%
Dinwiddie County	1.4349	1.4522	1.21%
City of Petersburg	0.9601	0.9760	1.66%
Prince George County	1.3733	1.3698	-0.26%

(1) The FY2019 rates included for comparison purposes reflect certain recommended adjustments to the allocation of 2012 and 2017 bond debt service payments shown in the existing FY2019 budget to be considered for approval by the Authority Board by no later than June 30, 2019.

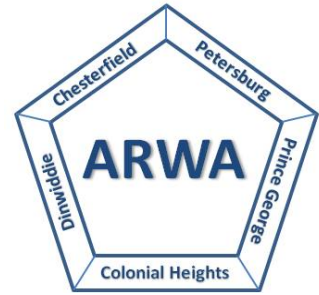
The rates are subject to change in accordance with the water service agreement based on, among other things, the amount of water actually purchased by each member jurisdiction and the amounts of revenues received and expenses incurred by the Authority during FY2020.

4. Executive Director's Report:

- **Reservoir Status Update for February 2019**

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

Following are status reports concerning the Ongoing Projects, Operations, and Financials for the ARWA.



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

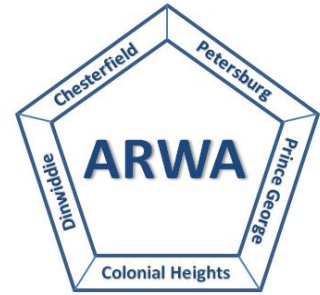
DATE: March 21, 2019

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

In-Plant Capital Projects:

- The following key elements relative to project have been completed in 2019:
 - Sedimentation Basin Sluice Gate installation
 - Generator placement
 - Electrical Switchgear building installation
 - Electrical ductbank, wiring, and switchgear installation (ongoing)
 - VFD installation – Finished water
 - Raw and Finished water discharge valve installation
 - Valve repair between Clearwell No. 1 and 2

- Based on conversation with Sydnor, we anticipate the first pump to be delivered no later than April 1st.



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: MARCH 21, 2019

Operating Status Report

General:

- The next scheduled Board of Directors Meeting is **Thursday May 16, 2019** at the Appomattox River Water Authority at 2:00 pm.
- Preparation and planning is ongoing for the upcoming ARWA annual flushing program. As a reminder, this is scheduled for the week of March 26th.
- SARA Title III Tier 2 reporting has been completed and submitted.

Operations:

- Finished water met all permit requirements for January and February 2019. Copies of the VDH monitoring reports are available if anyone would like to see them.
- The Granular Activated Carbon caps for the ARWA filters was exchanged on filter 1-12. The ARWA is on a 3 year rotating exchange schedule for all 32 filters.
- Preparing for clearwell 2 outage for the week of 3/18/2019.
- Preparing for electrical outages the week of 3/18/2019.

Maintenance:

- Staff is working closely with the electrical contractors to ensure interruptions to the operation of the facility are limited.
- Transmission line easements were inspected. There were some areas requiring clean up and that is ongoing. This is performed on an annual basis.
- Preparations are being made for our annual flushing program that is schedule for the week of 3/25/2019.
- Irrigation system inspections are ongoing.

Instrumentation/IT:

- A replacement penstock meter has been installed and is operational.
- Meter calibrations will be performed on March 18th by an outside contractor.
- Filter Operating Table upgrades continue.

Laboratory:

- Whole Effluent Toxicity testing of the ARWA effluent discharge from the sludge lagoons passed.
- Consumer Confidence Reporting has been submitted to the Virginia Department of Health –Office of Drinking Water for review.

Financial Status Report:

Following is the Executive Summary of the Monthly Financial Statement that includes the YTD Budget Performance and the Financial Statement for February 2019.

Appomattox River Water Authority-Balance Sheet
For Month Ending February 28, 2019

Assets		
Current Assets		
Petty Cash	\$	400
SunTrust Operating Fund	\$	3,354,348
SunTrust Replacement Fund	\$	-
Total Unrestricted Cash	\$	3,354,748
Water Revenue	\$	2,103,830
Reserve Account	\$	2,991,145
Replacement Account	\$	903,408
Debt Service Reserve	\$	1,063,882
Bond Principal/Interest	\$	2,690,250
Bond Construction	\$	9,792,181
Total Restricted Cash	\$	19,544,695
Total Checking/Savings	\$	22,899,443
Accounts Receivable	\$	-
Other Current Assets	\$	12,599
Inventory	\$	160,010
Total Current Assets	\$	23,072,053
Fixed Assets		
Land and Land Rights	\$	1,090,685
Water System	\$	85,625,821
Equipment	\$	1,176,668
Hydro	\$	34,873
Construction in Progress	\$	803,082
Accumulated Amortization	\$	(34,175)
Accumulated Depreciation	\$	(47,059,529)
Total Fixed Assets	\$	41,637,425
Other Assets		
Def Out Res-Post ER Pension Costs	\$	74,997
Deferred Outflow-OPEB GLI	\$	7,729
Def Out Res-Net Dif Pension Inv	\$	36,171
Total Other Assets	\$	118,897
Total Assets	\$	64,828,374
Liabilities & Equity		
Current Liabilities		
Accounts Payable	\$	1,021,116
Retainage Payable	\$	-
Accrued Interest Payable	\$	198,754
Total Current Liabilities	\$	1,219,870
Long Term Liabilities		
Def Inf Res-Pen Chg Assumptions	\$	132,365
Def Inf Res-Pens Dif Proj/Act E	\$	82,326
Net Pension Liability	\$	(118,326)
Def Infl-OPEB Chg of Assumptions	\$	3,106
Deferred Inflow-OPEB GLI	\$	16,000
Bonds Payable-2010	\$	7,415,016
Bonds Payable-2012	\$	2,372,000
Bonds Payable-2017	\$	12,750,000
Accrued Leave Payable	\$	193,901
Post Employment Benefit	\$	107,038
OPEB Liability-GLI	\$	119,000
Total Long-Term Liabilities	\$	23,072,426
Total Liabilities	\$	24,292,296
Equity		
Retained Earnings	\$	(3,281,219)
Reserve for Operations	\$	3,341,142
Reserve for Water Revenue	\$	5,991,639
Reserve for Replacements	\$	500,000
Reserve for Bond Interest	\$	198,754
Reserve for Debt Service	\$	2,142,022
Reserve for Bond Principal	\$	1,370,000
Reserve for Reserve	\$	2,602,136
Fixed Assets, Net of Debt	\$	30,696,880
Net Income	\$	(3,025,276)
Total Equity	\$	40,536,078
Total Liabilities & Equity	\$	64,828,374
	\$	-

Appomattox River Water Authority
YTD Income Statement for the period ending February 28, 2019

Water Rate Center

Revenues and Expenses Summary

<i>Budget</i>	<i>Budget</i>	<i>Actual</i>	<i>YTD Budget</i>	<i>Variance</i>
<i>FY 18/19</i>	<i>Year-to-Date</i>	<i>Year-to-Date</i>	<i>vs. Actual</i>	<i>Percentage</i>

Operating Budget vs. Actual

Revenues

Water Sales	\$ 10,163,119	\$ 5,081,559	\$ 5,679,197	\$ 597,638	11.76%
Misc. Revenue	\$ 30,000	\$ 20,000	\$ 9,076	\$ (10,924)	-54.62%
Total Operating Revenues	\$ 10,193,119	\$ 5,101,559	\$ 5,688,273	\$ 586,714	11.50%

Expenses

Personnel Cost	\$ 2,378,100	\$ 1,585,400	\$ 1,568,573	\$ (16,827)	-1.06%
Contractual/Professional Services	\$ 952,500	\$ 641,167	\$ 594,202	\$ (46,964)	-7.32%
Utilities	\$ 824,000	\$ 549,333	\$ 561,437	\$ 12,104	2.20%
Communication/Postal/Freight	\$ 39,200	\$ 26,133	\$ 25,836	\$ (297)	-1.14%
Office/Lab/Purification Supplies	\$ 101,000	\$ 67,333	\$ 68,434	\$ 1,101	1.63%
Insurance	\$ 90,000	\$ 90,000	\$ 85,804	\$ (4,196)	-4.66%
Lease/Rental Equipment	\$ 20,000	\$ 13,333	\$ 7,172	\$ (6,161)	-46.21%
Travel/Training/Dues	\$ 51,400	\$ 34,267	\$ 21,751	\$ (12,515)	-36.52%
Safety/Uniforms	\$ 26,000	\$ 17,333	\$ 19,789	\$ 2,455	14.17%
Chemicals	\$ 2,300,000	\$ 1,533,333	\$ 1,366,969	\$ (166,365)	-10.85%
Repair/Maintenance Parts & Supplies	\$ 330,000	\$ 220,000	\$ 193,294	\$ (26,706)	-12.14%
Total Operating Expenses	\$ 7,112,200	\$ 4,777,633	\$ 4,513,263	\$ (264,371)	-5.53%
Operating Suplus/(Deficit)	\$ 3,080,919	\$ 323,926	\$ 1,175,011	\$ 851,085	262.74%

Replacement Outlay Budget vs. Actual

Machinery & Motors	\$ 160,000	\$ 106,667	\$ 116,808	\$ 10,141	9.51%
Instrumentation	\$ -	\$ -	\$ -	\$ -	#DIV/0!
SCADA	\$ 50,000	\$ 33,333	\$ 107,024	\$ 73,691	221.07%
Computer Equipment	\$ 10,000	\$ 6,667	\$ -	\$ (6,667)	-100.00%
Furniture/Fixtures	\$ 6,000	\$ 4,000	\$ -	\$ (4,000)	-100.00%
Motor Vehicles	\$ 28,000	\$ 18,667	\$ 35,540	\$ 16,873	90.39%
Special Studies	\$ 400,000	\$ 266,667	\$ 30,520	\$ (236,147)	-88.55%
Valve Replacement	\$ 50,000	\$ 33,333	\$ 9,200	\$ (24,133)	-72.40%
Concrete	\$ 25,000	\$ 16,667	\$ 3,100	\$ (13,567)	-81.40%
In-Plant Capital Upgrade	\$ -	\$ -	\$ 3,712,458	\$ 3,712,458	#DIV/0!
Flow Meters	\$ 40,000	\$ 26,667	\$ 13,454	\$ (13,212)	-49.55%
Replacement-Other	\$ -	\$ -	\$ 64,000	\$ 64,000	#DIV/0!
Total Capital Outlay	\$ 769,000	\$ 512,667	\$ 4,092,104	\$ 3,579,437	698.20%

Debt Service Budget vs. Actual

Interest Income	\$ -	\$ -	\$ 289,326	\$ 289,326	#DIV/0!
Interest Jurisdictions (Income)	\$ -	\$ -	\$ -	\$ -	#DIV/0!
Interest Expense	\$ -	\$ -	\$ 397,509	\$ 397,509	#DIV/0!
Principal Payments	\$ 2,142,225	\$ 2,142,225	\$ 1,370,000	\$ (772,225)	-36.05%

5. Items from Counsel

6. Closed Session

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

8. Adjourn