# WATER COMMITTEE FEBRUARY 27, 2019 MINUTES

**MEMBERS PRESENT:** Pete Frisina, Chairman

Frank Destadio, Vice Chairman Steve Rapson, County Administrator Lee Pope, Water System Director Charles Oddo, Commissioner

Bill Holland

ABSENT: Jimmy Preau

**NON-VOTING MEMBERS:** Dennis Davenport, County Attorney

Jason Bodwell, CH2M/Jacobs

**GUESTS:** Cary Dial, WASA

**Alice Reeves, Historical Society** 

**STAFF PRESENT:** Russell Ray, Carrie Gibby, Vanessa Birrell

The meeting was called to order by Chairman Pete Frisina at 8:00 A.M.

## I. APPROVAL OF MINUTES FROM THE MEETING ON FEBRUARY 27, 2019.

Vice Chairman Frank Destadio made the motion and Bill Holland seconded, to approve the minutes from the meeting on February 13, 2019. The motion passed unanimously.

#### II. SINGLE FAMILY TOILET REBATE PROGRAM AMENDMENT.

Mrs. Speegle explained the toilet rebate program changes are highlighted on the last page of the handout. Mr. Pope explained the amount of money refunded is changing based on the amount it saves you per flush. The rebate amounts are changing for the 1.6 gallons a minute and 1.28 gallons a minute. There is no cost to us. We put money in this account every year; as those funds are drawn down, we add more funds. We can actually come up and say we are not going to put any more money in that account, if we wanted to. We could choose not to fund it anymore, but that is not likely to happen. How the funds are being dispersed is changing. The Memorandum of Agreement with the Metropolitan North Georgia Water Planning District will need to be approved by the Board of Commissioners.

Steve Rapson made a motion to approve this as a recommendation to the Board of Commissioners on a future agenda. Mr. Pope seconded. The motion passed unanimously.

#### III. STARR'S MILL UPDATE.

Vanessa Birrell, Director of Environmental Management explained in 2017 there was a buffer disturbance on the stream that goes to Starr's Mill. They investigated the complaints and reports. She said Mr. Harper had just bought the land just adjacent to Starr's Mill Water System property. He did a lot of land disturbance on the Water System property as well as the spring on his property. We consider this State Waters, the creek flows into Whitewater Creek.

Mr. Pope said this has been ongoing for a few years. Ms. Birrell said it has been ongoing since the first of 2017. She said they went out there to find out what kind of land disturbance he was doing and they had it surveyed. Since then they have been working nonstop. She said he had a head injury and was out for about six months; but he finally got it stabilized.

She showed pictures of the site before and after. She said they are closing it out, and told him not to trespass on the property. She went on to say they made him submit a landscape plan and a buffer replacement plan and he finally got those to them. She said they approved them and then, Nancy, one of our inspectors went to see the install the middle of February.

She described the photos, how it looked before and what it looks like after. He had gotten rid of all the natural brush, so it looks very suburban. She showed the stream going to the creek. He was having a lot of erosion after he cleared all the trees; so he dumped a ton of rock into the bank of Starr's Mill. She showed where he has cleaned that up and you can see some of the bushes he planted with pine straw around them; also, the trees; they are all nice maple trees.

Ms. Birrell stated what we need to be really aware of, and she does not know who is going to do this, is watering this the first year. Mr. Pope said he saw that email and he does not know if our Maintenance guys will do it with a tank, or something. He said he and Russell have not had a chance to look at it. He said we have had pump issues that have taken precedence of their time. He said we will definitely get on that before spring. Ms. Birrell mentioned asking Building & Grounds to do it.

Ms. Birrell pointed out where we had four or five thirty foot trees at the stream and he came in in the middle of the night. Vice Chairman Destadio asked about him being required to keep them alive at least for two years like most landscape people would be. Ms. Birrell said because it is our property he trespassed on; we don't want him on our property. That was the problem; he thought he was doing a favor by mowing and taking out all those trees. He was having a flooding problem; he originally called us out to see if we would enlarge the pipe under the gravel road going over to the Mill. While they were there, they found the disturbed buffer and he was on our property.

Ms. Birrell stated it looks good now, he has done a good job and we just need to keep it up. There may be something Building & Grounds can do for a while. Mr. Pope said we will work that out. Further discussion pertained to where Water System property is located by viewing the photos Ms. Birrell provided.

Mr. Rapson summarized that we had a problem with a neighbor and the neighbor has now fully complied with fixing all the things we asked them to fix. Mr. Pope said the reason it took so long is he had an injury. The trespass has been removed and we will insure compliance from now on. Ms. Birrell stated she has closed that CSR.

#### **HISTORICAL SOCIETY – STARR'S MILL REPORT**

Alice Reeves, President of the Fayette County Historical Society updated the Committee. She said thanks to the Board of Commissioners and the Water System, the Historical Society has been able to open Starr's Mill once a month, beginning in January on the second Wednesday from 10:00 to 2:00. Even before they advertise it, in January they had 14 visitors that day. As they do at the Historical Society they keep track of who comes in. She said we had folks from California, Michigan and Minnesota that just happened to be there that day.

Mrs. Reeves said in February they had 9 visitors. They noted there were probably twenty something cars that came and went during that time. She said they are going to get a flag they can put outside that says "Open" during the day they are there, just to let folks know. Mr. Pope said we could provide whatever they want. Mrs. Reeves said they got some good advertising in the paper that they were going to be open. She received a call from a group that wants to bring 20 in March. She said she thinks, especially through the summer, we will have more and more folks come by. It is a work in progress and they appreciate the joint effort.

#### IV. WATER SELECTOR UPDATE.

Mr. Pope reported on the water selector being installed at both Lake Horton and Lake McIntosh. The way they set it up they will bring the one in for installation at Lake McIntosh first. It has been installed, but is not in operation yet because they are still working on the control panel installation. He described the water selector and explained how it works by showing photos taken during the installation process. He explained the elevator doors will open based on the condition of the water quality that will be programmed on the algorithms that we choose for what we are looking for to improve water quality brought into the water plant.

Mr. Pope went on to show the bottom and top of the water selector. He showed where people will stand if they have to go out to do any service. They lifted it by crane to bring it around the pump house building to get in front of the gate. He explained it is installed over gate number 2. Most reservoirs have a low, medium and high gate; that is just the way you operate all reservoirs. Those are your three choices, rarely do you ever pull from the bottom gate, for obvious reasons. He said

we installed this over gate 2; that is the selected gate in most reservoirs. That means we still have gate 1 and gate 3 that is usable if something goes crazy with the water selector and it goes out of service. We can still use our other gates to pull water into the Water Treatment facility. If it fails, they fail to open, so we should still be able to use gate 2 like normal, we just won't be getting optimum water quality into the plant.

He went on to say they installed it over gate number 2 and he showed the picture where it is basically under water and they are scooting it up next to the building and raise it up in place. The next photo showed the way it is today; it is actually bolted to the structure and goes all the way down almost to the bottom of the reservoir, within about six or eight inches of the floor. The water selector will monitor water quality at those 12 or 14 levels on a constant basis; it is going to pull a sample, constantly running and looking at the qualities we want it to look at; DO, turbidity, algae growth, all those type of items at all those levels constantly. Whichever one is the best based on what we choose to consider priority. He stated eventually he will have charts that chart each item; you figure out where they cross and that is the best quality of water. We will tell it which gate we want it to pull from, it will tell itself morning and afternoon could change depending on the water quality.

The benefit is this will bring the best quality of water into the plant minimizing wasted water through the treatment process. Now sometimes we bring water in that is not necessarily treatable, so it becomes a bypass in the operation. It will eliminate that. It is going to give the best quality of water as far as how much chemicals we have to use to treat it. You hear of people all the time complaining about the amount of chemicals that is placed in the water. We are putting chemicals in the water and taking them back out. We will minimize that cost, it will hopefully eliminate taste and odor, completely. That is one thing that by choosing water quality, we should be able to eliminate the use of carbon, which is not the most expensive chemical, but it is fairly expensive. The permanganate that we also use for taste and odor is getting to be extremely expensive. We are going to minimize the amount of those two chemicals that we will have to use in the treatment process. It is going to save us money.

Mr. Pope commented the key is, this is the first one in the world, so nobody has ever done this anywhere. The United Kingdom is looking at buying about four right now for some areas they are having some water quality issues, similar to what this county faced in 2013. This is the only one in the world that exists.

He explained the water will be pulled into the square chamber, water will go into gate 2 and will be pumped to the plant. We have isolated gate 2 as our intake for our pumps. Mr. Rapson commented it is fixed over that, but all the gates are going to open and close based on the water quality. Gate 1 and 3 will be closed.

Mr. Rapson went on to say we have a contract to do two, but we are going to the first one and validate it after thirty to sixty days, the cost savings. A lot of this,

when it was taken to the Board was the cost savings associated with chemicals, so we know what we are paying for chemicals before it was installed, then we are going to validate what we are paying for it after it is installed to validate that savings before we put the switch on the second gate.

Mr. Pope said Mr. Rapson did a great job negotiating because some of the Commissioners had concerns right in the middle of the approval, but they went ahead and approved it. Since they had concerns we worked out with the contractor to do one; it is designed and developed by IXOM Water. We had a lot of consultation with them when they were developing this. He said Mr. Rapson negotiated with them to let us do one, let us show the chemical savings and then we will do the other one. He said he thinks what you are about to find is people are fixing to start installing these. There are two plants being built in Tennessee that are going to incorporate this in their design of their intake structure.

Vice Chairman Destadio mentioned the problems we had with Lake Horton when we were pulling the water from the bottom. We would now know we were doing that automatically using this. Mr. Pope said, right, what happens is, imagine you have an operator doing depth samples. We started this when he got here. They went out and pulled a sample about every five foot increment. That is a grab sample, the operator gets it, runs back to the plant and measures for optimum water and it is at 15 feet. That could have changed in the amount of time it took for him to run that. This is going to be constant, it will always be looking at the water quality. He said he and Mr. Rapson chose to go with an automated one.

Mr. Rapson commented they chose to take the human factor out and just let the gates decide based on the water quality. Mr. Pope said they installed the manual one in LaGrange; they are looking at the results and saying "Yes we probably need to go down there and open gate number so and so", but the operators are not doing it. He said we should constantly see the best quality of water coming into our own site.

Mr. Bodwell asked about the span of distance between the six gates. Mr. Pope replied he thinks it is 15 inches. He said he would get the design on it for Mr. Bodwell. That is based on our reservoir. The engineer that designed this particular one was David Jaeger with Mallett & Associates who designed our intake. They partnered with him because he was familiar with the intake.

Vice Chairman Destadio asked about the cost. Mr. Pope said it was right at \$500,000.00. Mr. Rapson said he thinks this one was a little bit more than that, but they are both right at \$750,000.00. Mr. Pope said they are not selling them for that price anymore. Mr. Rapson said the good thing about it is the payback analysis is seven years. We could take six months of data and extrapolate that into that savings analysis. That is what everybody is waiting for; there is no reason why it shouldn't be true.

Bill Holland asked if one of these gates opens, the water is now flowing through that, but how is it being drawn into what? Mr. Pope explained basically it has a chamber, the way it is designed. Whichever gate decides it is the best quality of water, when it opens that chamber will fill, then the water will go through gate 2 into the pump station, just like it would if you were operating on gate 2.

Mr. Pope said there is very minimal operation equipment in it, it uses ballasts like a submarine to open and close gates, so it pumps air into those chambers or allows water to flow into it; that is how it operates the gates. Most of the operational equipment is going to be above ground, so if you have to do any service, you don't have to have a diver.

Mr. Pope said we did have a Commissioner ask what happens if we are in a drought. It will pull based on the best quality of water, wherever we have water. It will just be looking at those bottom four gates, or whatever, just like you would do if you were operating it.

Mr. Ray explained the side you can't see on the photo is all open to the concrete wall, so when the gate opens, it allows water to flow in and it can get to the gate in the wall and then it just pulls it in because we are pumping.

Mr. Pope said IXOM was on site; they are the designer and developer of this new technology. They have a lot of pictures and video that he plans to use to put a presentation together with more details. He commented that LaGrange has one and they are struggling because they can't get their operators to go down and make the adjustments because you literally would need to change the gates every hour or so. They look at and if they are pulling from gate 1, but would be better off to pull from gate 2 or 3, but 1 is close enough. They are not benefiting from it like they had anticipated.

#### V. TANK REPAIR AND MAINTENANCE UPDATE.

Jason Bodwell presented a global budget of where we were originally with the tanks and where we are now. We have five tanks and the way we originally split it up, we were going to do two tanks this year and three tanks next year and we split the money up. Originally we thought we would hit Highway 92, we demolished Twin Tank 1 and fixed Twin Tank 2 for a total of \$287,000.00. Because of some additional work that is needed on the Highway 92 tank we had to shift some money around. He said we revised it to this year just the Highway 92 tank because of the additional work that is needed and we have taken the Twin Tank 1 down. This year we will be able to stay with just these two in that budget. Next year is going to be a bit more challenging, we are going to have to go back to the Commission and ask for some additional money because we are pushing some of these tanks out to the next fiscal year.

He outlined what will be done next year, the reason there are two in red are because we haven't opened up the Crabapple or Ellis Road tanks, yet, to see if there is any additional potential work to be done.

Vice Chairman Destadio asked about this being maintenance on the tanks. Mr. Bodwell replied he would call it repair versus maintenance, hopefully we will get to the maintenance after it has been repaired. He said what happened with 92 is they opened it up and there is a lot more deterioration than they anticipated. He said he has pictures to show the Committee.

He went on to say they are draining the Crabapple and Ellis Road tanks and will hopefully open them up in the next two weeks to do a preliminary look at those two tanks to see if there is any additional work that is needed that is above and beyond what was budgeted and the logos and all the allowances as well. He said the \$666,000.00 may go up in the next couple of weeks depending on when they drain the Ellis Road and Crabapple tanks to see if there is any additional work that is needed.

Mr. Pope commented since we were surprised at the Hwy 92 tank, we figured we would just make it one big surprise, go ahead and look at all the tanks, so we could come back to everybody with one number instead of hitting everybody with every single tank.

Mr. Rapson explained we went out for a bid for all five tanks, so all five tanks is \$287,000.00 plus \$520,000.00. He explained we split it across two different years the plan originally, and now the revised plan. He said we will end up coming back and doing Twin Tank 2 as well as the allowances next year, then Crabapple we had already anticipated that one to be the worst shaped tank which is why that cost is so much more than compared to Ellis Road and Highway 92. Mr. Bodwell said the total the Commission provided was \$807,900.00 and we will have to go back and ask for at least \$950,000.00

Mr. Rapson explained those are in the M&O budget because we consider those to be repair and maintenance to tanks, even though they are extending the life, you can make an argument that maybe you have some betterment going on, but we will see how that shakes out.

Mr. Bodwell said they did drain Twin Tank 2 and looked at it; there is no additional work to be done, it looks pretty good. The work that was originally bid will be the only thing completed there.

Mr. Pope said he thinks the inspectors were in Ellis Road yesterday, but they haven't gotten back with us and given us a report. Mr. Ray said that is right, we don't have anything official from Southeastern yet, but it did appear there was additional corrosion, so we can expect it. Vice Chairman Destadio asked about Crabapple being in pretty bad shape. Mr. Ray said more, yes.

Mr. Holland asked how much a new tank cost if it takes this much to repair it. Mr. Rapson replied a million and a half for a small tank. Mr. Pope said it is almost \$1.00 for every gallon you get, a million gallon tank will cost you about a million dollars each. A two million gallon tank will cost about two million dollars. Mr. Ray commented that was when these were built, that may have gone up by now. Mr. Rapson agreed it is probably a lot more than two million. Mr. Bodwell said these have not been touched in years, that is why this is so expensive, but once we repair them and get onto an annual maintenance program this won't be needed.

Mr. Bodwell then showed some photos of the Highway 92 tank and the demo of the Twin tank 1. There is significant corrosion in the 92 tank, it has corroded significantly in the last five years or so, since Tank Pro did the original inspection. They pressure washed everything, the biggest piece of the scope was pressure washing, cleaning the inside and out. He showed photos of the pressure washing being done, what was taken out of the bottom of the tank (silt), the underside and the inside of the 92 tank. He explained they did not expect this much corrosion and the way they priced it out was repair per square foot and you need to repair the entire top side of the bowl, so you really can't price it out per square foot. Southeastern has given us a great price, they originally quoted \$20.00 per square foot of coating repair. That probably would have cost about \$300,000.00 to repair the whole thing at the \$20.00 price; but they gave us a bulk discount of just over \$11.00, so to repair it will cost \$132,000.00. He said they have worked with us, they have been great. They want the work and they are out there, they don't want to gouge us. They can mobilize easily, so we want to do it now to take advantage of this less expensive price.

He then described the demo of the Peachtree number 1 tank. He said he was not there that day. Mr. Rapson said he had them cut him a piece of the tank to place in his office. Vice Chairman Destadio asked if he had it labeled so we know what it is and Mr. Rapson said yes. Mr. Bodwell said it looks like they just sliced it, they took the top off and then...Mr. Rapson said they cut it, then cut it in strips and they literally cut it in strips the size of a car, then they put it on the ground, cut it in half and then they loaded it in the dumpster. Mr. Bodwell showed a photo them cutting one on the ground.

Mr. Rapson said what was interesting was they had fire extinguishers, they had to keep running over to put out the plywood that caught on fire when they were cutting it. Mr. Rapson said it was an entire staging operation and you could tell they were really conscious of where everybody was, and they had hard hats and did a good job. Mr. Pope said they are the only company he knows of that demos tanks, literally everybody that does one, this the company they use. Mr. Bodwell said the name of the company is called Isler, and they are out of Ohio.

Mr. Bodwell went on to discuss the logos. Right now the tanks have the Fayette County logo on them. Three of the tanks have two logos; they will be painted over

and be replaced with the Fayette County Water System logo. He said they have the color schemes; he showed a schematic of what it will look like when complete. There will be one on each side, they have checked to be sure they will fit in their design. The Peachtree City tank, the remaining one, they are working with Jon Rorie to put his new logo on there. They have not quite figured out how that will go, he is not so sure we will be able to fit two of ours and two of theirs on there; he said he does not know how they will figure that out, but that is not going to be until next fiscal year, probably in the Fall, probably September or October.

Mr. Bodwell said they will start the Highway 92 tank on the underside in the next couple of weeks and should be complete four weeks from now. Then they will put the water back in and bring it back in service. He said he has given them the verbal go ahead that we want to spend the \$132,000.00 while they are out there. We don't need to ask the Commission for any more money to get that done, just to move money around. Mr. Rapson said we have a process and we will get it approved.

#### **VI.** WATER PLANT UPDATE.

Mr. Bodwell commented we are in a holding pattern waiting for Mary to present to the Commissioners the movement of the mid-year budget adjustment. Mr. Rapson said he will be talking to Lee, and then go to the Water Committee, have a conversation with Frank and then take it to the Board. Mr. Pope said they wanted to update the Water Committee on what we are planning to do first, then we will take it to the Commissioners. Mr. Rapson said it will be a good exercise to walk the Committee through how the 5 year plan is updated.

Mr. Pope reported the Crosstown Water Plant was evaluated for being Plant of the Year, they qualified to be in the Plant of the Year competition. There are some things that probably need to be addressed. He said he does not know if we will win or not, but we will get a good standing and we will improve for next year. We are also putting in a resinous floor coating in the Crosstown Plant, as we speak. Basically this is a cement coating on the floor that will be able to handle the harsh environment, we were in pretty bad shape before the upgrade.

Mr. Pope went on to say in March we will have a Sanitary Survey and the State is considering us to be one of the systems they use to train new inspectors. Margie has not quite decided when she is going to bring a group here yet, or not. The way we do Sanitary Surveys, there are different sections of things, we have to show our data. We do a data table and have that information readily available for her when she comes, instead of most plants have to say "Oh, I think we've got that, let's go see, that might be in Engineering." We have that data table and they want to show people how we make the inspection easy. It really should be easy. The Sanitary Survey is based on your day to day operations, things you should be doing anyway.

Mr. Rapson commented we had issues in the past with our Sanitary Survey and now we are the training ground for EPA, in regards to how they come down and conduct

Sanitary Surveys. Mr. Pope said Margie is a new inspector. Vice Chairman Destadio commented there were problems with the inspectors, too. Mr. Rapson said that is true, but what is interesting now is the inspectors are coming down but they are bringing two or three lead engineers that are trying to become inspectors and they are using this as their training ground. He added he is sure they have a copy of our old Sanitary Survey and they have a copy of our new one and how we are doing it today. Vice Chairman Destadio said that is a compliment. Mr. Rapson agreed.

Mr. Pope commented that when Commissioner Oddo was coming to these meetings a few years ago, we talked about trying a new phosphate called Sea Quest which actually helps not only protect your pipes, but it also helps remove iron and manganese from your system. We got a whole demonstration and we just got approval from the State to start testing that. Three years in the making, but we have gotten approval now to test that. This year we will start testing a new phosphate. We had already started doing coupons in our distribution system where basically there are different types of metal. We see how the corrosion rate is so we can adjust the phosphate feed. Now, we will utilize that data to decide what dosages of Sea Quest feed and hopefully start seeing some improvements in our distribution system. The goal is to never have a stained water complaint again. That is what other systems have seen with the Sea Quest product. It is not cheap, but it is going to improve the quality of water the citizens receive.

#### VII. PUBLIC COMMENT.

Mr. Pope presented the project worksheet that was discussed at the last meeting that Vice Chairman Destadio had said the previous Board had gotten. He said this is where Tony would put together a list of ongoing projects. He said he is thinking about giving the group something like this, if that would be satisfactory on the projects. We have an excel sheet that is given to Mr. Rapson.

Mr. Rapson said he has already sent them the excel sheet. Mr. Pope said we can definitely give an update on the projects, when we do updates in here, we probably don't touch on all the projects sometimes. We juggle a lot of stuff.

Mr. Rapson said he thinks you all want the detailed projects that he sent. That level of detail is what they want, which is much more. Rather than create another process, he will just share the one that is already being updated.

Mr. Ray explained the logo on the Highway 92 tank is aligned to be most visible to the road. He showed the angles on the GIS map and described the positioning on the tank. The logos are not 180% opposite each other. He said he just wanted to point that out in this case. Mr. Rapson said he is less worried about this one, he is more concerned about the 54/74 tank. How that one is positioned, putting Peachtree City in the back where nobody sees it is not going to be the answer.

Mr. Pope commented that when we get out there with the templates, we will probably involve Peachtree City with the placement. Mr. Rapson said he agreed.

### VIII. ADJOURNMENT.

Vice Chairman Frank Destadio made a motion to adjourn the Water Committee February 27, 2019 meeting. Lee Pope seconded. The motion passed unanimously.

There being no further business, Chairman Pete Frisina adjourned the meeting at 8:45 A.M.

	Peter A. Frisina
The foregoing minutes were a the 13th day of March, 2019.	approved at the regular Water Committee meeting on
Lisa Speegle	

**Next Scheduled Meeting Date: March 13, 2019**