# WATER COMMITTEE MARCH 13, 2019 MINUTES

MEMBERS PRESENT: Pete Frisina, Chairman

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

Jimmy Preau Bill Holland

NON-VOTING MEMBERS: Dennis Davenport, County Attorney

ABSENT: Jason Bodwell, CH2M/Jacobs

**STAFF PRESENT:** Russell Ray

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

# <u>I. APPROVAL OF MINUTES FROM THE MEETING ON FEBRUARY 27, 2019.</u>

Vice Chairman Destadio made the motion and Bill Holland seconded, to approve the minutes from the meeting on February 27, 2019. The motion passed unanimously.

#### II. WATER SELECTOR UPDATE.

Lee Pope reported the Water Selector is installed and operational. The electrical control panel is installed and he recommended the Committee go look at it. He said a meeting will be scheduled soon at the Crosstown Water Plant; they can look at the plant and then ride down to Lake McIntosh to see the Water Selector.

Mr. Pope commented this is the first in the world. IXOM is already saying they are going to change out the stand because it is made out of iron, they think it is going to rust and they are going to go with aluminum. They are already seeing things they are going to improve. He said the first thing he asked is what is that going to cost him. They said it is powder coated but they don't think it is a good idea. There are things they are going to improve on, free of charge, with them improving their design. This will be their showboat item.

Vice Chairman Destadio asked if they will have to take it out in order to do that. Mr. Pope said this is up top, everything down below is stainless. It is functional right now. It is collecting the data and taking the samples at each gate. He said it is

pretty neat, how it does that; it watches itself to make sure it is getting a correct sample at each gate.

Mr. Pope explained they are able to log in and see it real time through a cellular modem that they have put in. They want to keep an eye on the database. There was some discussion about how we are going to get it brought into our SCADA. He said he was down there yesterday; we can put in a cellular modem here, which is how we communicate with some of our pump stations. They said we can use their cellular modem, all we need is a SIM Card. He explained we are going to add a SIM Card to it so that their modem will be able to communicate to our plant. We are going to have a laptop at the plant and start collecting that database. The reason for adding a laptop is because it needs to start recording that data. They can only hold thirty plus days of data in their Project Loss Controller (PLC), so we need to start collecting that as quickly as possible. It is set to offload the data real-time, so it is not set up to hold a lot of it locally.

Mr. Pope said he logged in and looked at it; we are allowing it to select gates at this point. We are letting it pull its samples, you can see where it samples as it goes through a cycle. Then it will make a gate selection. Yesterday it said it felt like it should be selecting gate 3 or gate 4; it was selecting gate 3 and we agree with that. Until we get our algorithms adjusted to what we want out of our water quality, because it is looking at so many different parameters, you have to decide what is most important to you. The phytoplankton changes throughout the day as the sun comes over and temperature increases. He said they watched it yesterday, trying to decide whether to change the gate or not, but it wasn't in charge and we were not letting it do it. It would have been selecting the right gate.

Vice Chairman Destadio asked if ultimately it will make the decision. Mr. Pope replied it will. It could now but Kelly said let's let it run, watch it and see what gate it chooses to select. We will continue to monitor it probably for a month or so before we give full control, but for all intents and purposes it is up and running. It looks like it is operating properly.

Mr. Rapson commented until it is selecting the gates and doing it logistically we are not going to flip the switch on telling them to do the second one because we have to do some financial modeling.

Vice Chairman Destadio clarified we were happy with what it would have selected; Mr. Pope said yes. It was right on board with where we would have been if we were in charge. It looks like it is moving again; the biggest thing is they are already seeing some improvements that they want to do. The company name is IXOM. Mr. Pope referred to the press release sent out this weekend. IXOM wanted to do a press release internationally, but waited until we did our local press release first since we are the first ones.

Mr. Pope stated we will continue to monitor it and see how it does. This is the first one in the world, no one has ever done this before – to this level and degree.

Mr. Rapson commented what will happen is everybody will retrofit, but new stations will just incorporate it. When a new reservoir is built, this will be built into the gate so a modification won't have to be done. Mr. Pope commented we were pulling depth samples once a month and tracked lake turn over. Now, by looking at dissolved oxygen we will know when the lake is about to turn over and we will be able to see it through turn over. The graphs chart every parameter and is checking at every gate.

# III. TANK REPAIR AND MAINTENANCE UPDATE.

Mr. Pope reported this project is moving along. We had some additional costs so we realigned and we will finish up at Highway 92 and then we will do the other tanks starting next fall. He said they have the logo on the 92 North tank.

Mr. Destadio commented that he went to a meeting in Peachtree City last Friday. Peachtree City will be 60 years old; Joel Cowan and some other people came up and talked. He said Chip Conner was there; he was the third mayor of Peachtree City; he asked about the plaque on the small tank that was taken down. Mr. Pope said Tony Parrott got it and it is now at the Historical Society.

Mr. Pope said he feels like it will be another few weeks before they get finished inside and out; when it is rainy they work on the inside. When it is good weather, they work on the outside. They are planning to be done in the next few weeks; hopefully the first week or so in April.

### IV. WATER PLANT UPDATE.

Mr. Pope announced one big thing today is our Sanitary Survey inspection. The state is here this morning; they started at the South Fayette plant. They have the schedule to do the South Fayette plant inspection today; they will go to the Crosstown plant tomorrow and then Friday, they will finish up with the Distribution Shop. Generally the Distribution side only takes them a few hours, so he anticipates they will be out of here before lunch Friday. If they get ahead of schedule Thursday they will move on over there, but just going through the paperwork itself and verifying that generally takes them a day to do a plant. Mr. Pope stated it will be six months before we get the report back. He said he noticed the other day they did our last Sanitary Survey August 8, 2016 and we got the report January 2017. It looks like it takes about five or six months to get that report back.

Vice Chairman Destadio asked if Mr. Pope was expecting any problems. Mr. Pope replied no, not at all. At the South Fayette plant we have the purate chlorine dioxide; a capital project we are realigning funds to get that started. We are having

WC3-13-19

some issues with that. He said it started acting up with some of the mixing equipment, so we are going to try to get that stuff repaired as soon as possible. It is every day stuff, but it is hard for that equipment because it is so obsolete, it is hard to find. The mixer motors; if you buy a traditional mixer motor; because it is such a corrosive environment it won't last very long. That may be what we have to go with to get us operational, but we know we are going to be replacing that unit in the future, anyway. He said we are going to get that repaired as quickly as possible. If chlorine dioxide does not work at that plant, that plant is off line, that is how critical to the treatment process that is. They can't treat the manganese.

Mr. Pope stated staff did an excellent job with our pumps; we had some pump issues. We have three pumps at the Crosstown plant that pump to the general area of the distribution system; our high service pump station. Pump number two we were upgrading to a VFD Drive, so it has been out of service for six or eight months now, just going through the procurement and getting that designed and installed. We were down to two pumps and pump three is a smaller pump, so it struggles to meet demand. We weren't running it, it has some control valve issues that will be fixed as soon as the Sanitary Survey is over; we finally received the parts on that. Pump one was the pump we were leaning on the most. It failed on us a couple of weeks ago. We did an emergency repair, we anticipated that repair taking five weeks and it took about two to three weeks. Mr. Pope said GWWI came in, removed it on Friday morning with a crane, took it back to their facility, broke it down and then let Mr. Ray and Chet Ward, our Maintenance Manager went out and looked at it. Some of the parts on this had to be manufactured; they had to make them in their machine shop because they were not available.

Mr. Pope said they turned that pump around pretty quickly. They got it back and it is now operational. That was pretty critical; we were down to the only pump we had that would operate was three and it had control valve issue, which it still has, but the part is here.

Mr. Holland ask if there is a long range plan for redundancy in having extra pumps when something like this happens. Mr. Pope said we have more than one pump in each location, but there are some maintenance things we need to address as in the larger clear well down the hill has two pumps; pump six and seven. So, if one of those is out of service you are down to your last pump so we have already talked about in the future adding pump eight so we will have an additional pump.

Mr. Rapson commented when you talk about redundancy, there are three pumps there. To him it is more a maintenance issue than a redundancy issue. The redundancy is built in, you just have to make sure all three pumps are operational. Mr. Pope explained he drafted a memo to Mr. Rapson to give him a breakdown of where we are at with our pumps.

Mr. Rapson commented we think we need a \$250,000.00 pump refurbishment program; refurbishment means you buy a new pump or if you have a pump that is

not at the level you need you buy a higher rated pump. With that \$250,000.00 over the next year we think we will be able to get all the pumps, and we can stop talking about pumps in this meeting. Unfortunately, pumps are some of the smallest capital dollars you have for the system, but if it isn't pumping, then you don't have a system. We are making sure that we have that redundancy built in and we are actually expediting that so that we fund that in this next capital year. He said that is one of the things we will be talking with the Board about, it is extremely complicated; how we are realigning our existing capital budget and then what we are forecasting for our next five year capital budget to make sure we address those kind of issues.

Mr. Pope said what happened with the pumps is really ramped up and created a nice Maintenance Team in 2014. We did have a maintenance person on each shift. They were not able to work or function very well as individuals on a different shift. We pulled all those guys together and made one maintenance group. They are able to do preventative maintenance on a regular schedule as the manufacturer recommends, but we started that in 2014. Some of these pumps were 15 to 20 years old when we started it, so we had already gone down that useful life before we really started maintaining them at the level we probably should have been. We are maintaining our pumps pretty well, we just have some that are kind of behind the curve so they are going to give us some issues in the next few years.

Mr. Rapson said he calls it a four phase approach. The first year we focused extensively on Crosstown, got that plant up to speed; took every bit of two years to do that. Then we shifted our focus to the South Fayette plant. That plant is pretty much finished with the exception of the chlorine dioxide; that is also being scheduled. Then, the third phase was the tank maintenance, and phase four is distribution. Distribution is your pipes and your pumps. We have been systematically looking at those four phases and now we are starting to look at phase four; it sounds like we aren't taking care of our pumps. Take care of the plant first, take care of the second plant second, take care of your tanks because that is the primary infrastructure, now we are getting into the weeds. We are way below the critical needs, now we are in the grass. He said he thinks some of that is looking at these pumps and now looking at the capacities we have. He said keep in mind, as we go through this process for increasing our capacities we are also increasing the flows we have at Crosstown and all those type of things. Some of the pumps were pumping just fine; at this level they need to be upgraded, which is why we are putting that refurbishment program in place. It is a very logical systematic approach about how we are doing it.

Mr. Pope said the tank maintenance is a big expense right now, because we are doing a lot of catch up on those. Once we get this done over the next two years we will just do an ongoing maintenance program to maintain them, so it won't get this far behind again. Mr. Rapson commented he said there are four phases, but there is a phase five. Phase five we will talk about at Retreat, which is what do you do with all the...we are talking about the pumps at the station, now we are going to talk

about the meters at the homes. That is another big aspect of the distribution system, which is really on the residential side. We are talking about that at Retreat in regards to what is the plan to systematically replace all those meters. How are we going to approach that?

Vice Chairman Destadio said it would seem to him that we should be doing some of these repairs under an R & E account rather than the capital account. If we are going to have some immediate repairs that is what R & E is for. Capital improvement, he said he agrees, if you are going to be doing that, but have we looked at doing some of these immediate repairs under R & E? Mr. Pope commented he does not think we have the money in the budget.

Mr. Rapson said there is money budgeted in R & E, but when he says Capital, it means there is no difference between R & E and Capital; it is the same money. The R & E is what funds your capital plan. All we do is take the R & E (replacement and the enhancements of your existing system is what R & E is supposed to be used for). All of that funnels into and funds your Capital Plan, really what you see is the R & E expenses. When you look at a Capital Plan, you are seeing literally the line items of that R & E Plan in your five year Capital Plan.

Vice Chairman Destadio said yes, but you can use R & E for repair and extension before it put it into a capital plan for two years out. Mr. Rapson said the problem is the County historically has always wrapped them into an actual project. There has never been an R & E project. He said he has worked places where R & E is just, we have a million two in R & E and any of the things we are talking about would be a project that would fall under R & E and you could expend it that way.

Vice Chairman Destadio said he is just talking about if you have an immediate repair that you need to do, you don't have to wait for capital, in his mind, have to wait for it to come up in the budget. Mr. Rapson said we don't wait today; there is nothing magical about it, if it is an emergency repair it is immediately fixed. We don't wait until July 1, the following year.

Vice Chairman Destadio asked Mr. Pope if he is okay with that. Mr. Pope replied yes, he thinks what is important to point out is the pumps we rely on every day, if they fail tomorrow we are going to have to fix those, if they fail tomorrow; if they get to that point we are going to have to fix them. He said he does not care if there is money budgeted or not, he is just going to have to find the money. Mr. Rapson said he has money budgeted. Mr. Pope said he cares, but if it came down to the seriousness of it, we would have to find the funds, like we did with pump 1. That was the plan, \$29,000.00 is a lot of repair. The raw water pump station at Crosstown, for instance; there are four pumps, two of those pumps were sized when the plant was very small, and they pump about a million gallons a day a piece. We average five million gallons a day. Those two pumps are worthless to him right now. Three and four are our primary pumps, we probably need to upgrade those other two; that would be a capital project.

Vice Chairman Destadio said he wanted to clarify, he is not talking about taking a million gallon a day pump and replacing it with a three to five million gallon pump; that is a capital project. But if that million gallon a day pump goes out, and you know you now have pressure problems for the rest of the county, then you need to get that pump repaired. Then you can use R & E to get it repaired now. Hopefully, you don't want to spend a lot of money, but you have to get it pumping. Then you can plan on getting it repaired, maybe you can push it down because it is repaired and running good, but then you want to get it fixed or upgraded.

Mr. Pope said we have some repairs we need to address fairly quickly. Vice Chairman Destadio commented when Mr. Pope took over, he took over behind the power curve. There was a lot of stuff that wasn't done for a long time. Mr. Pope said just not doing the preventative maintenance on a pump shortens its life. You should be doing vibration analysis, laser alignment for your shafts. Those things should be done quarterly or annually. What we are looking at, hopefully pitching the footings, a vibration analysis on all of our equipment, maintaining it so that it gives us a constant report. That way if a variance is beginning to vibrate, Chet would be able to see it on a graph way before it ever became a pump failure issue and we could say "alright, within the next year we are going to have to rebuild that pump.

Vice Chairman Destadio asked about a pump running hot. Mr. Pope said pump 2 ran hot and that was due to the VFD Drive; we resolved that temporarily. Vice Chairman Destadio said it looks like they have it under control.

Bill Holland asked Mr. Rapson about the residential meters. He asked if Fayette County just pays to replace those. Mr. Rapson replied there are GEFA loans we could use, Revenue Bonds, Capital and pay as you go; all four options are being looked. He said we are going to evaluate all those options to make a recommendation on how we approach that at Retreat.

Mr. Holland commented he was hearing noises in the attic one day so they called out the bug guy, thinking they had a rat or something up there. He told them they did not have a bug up there, it was their water meter. He said they called Fayette County Water and they came out and replaced the meter, no questions asked. He said he thought it was great, but he wasn't sure why he did not get a bill.

Mr. Rapson explained the residential meters are owned by us as part of our system. That is why he did not get a charge for it. Vice Chairman Destadio asked if we use the electronic meters. Mr. Pope said we have drive-by. Mr. Rapson said we will be talking about that at Retreat. Mr. Pope said Retreat will be when we talk to everybody at the Retreat about it. Vice Chairman Destadio commented that is a big expense to replace all of them. What is the rate of return?

Mr. Rapson explained residential meters are mechanical devices; the question is are they wired in with technology or are they not. There is nothing wrong with a meter that is not wired in wit technology it is just less efficient for different reasons. What we are going to do is evaluate what type of meter we put in and what type of connectivity we put in. Having every meter we have with a feature so that you can do an automatic turn on and turn off probably doesn't make sense for every residential customer, but it probably does make sense for the handful of folks that always have those type of issues. The question is how do you mix and match those.

Vice Chairman Destadio commented he is not pitching one way or the other. In a previous life he did those water analysis studies and you can find out at 2:00 in morning, you can find there is still water going through the meter and probably the meter is bad. Then, it becomes the rate of return, are you willing to spend the money to do that. He said he is not encouraging that but meters get old and they run, they leak.

Mr. Pope commented it used to be meters were mechanical, like he said, but we will probably look at probably going toward an ultrasonic meter, there are not moving parts. That gives you a twenty to thirty year life span on them, it is still an expense, but those meters last a lot longer because there are not moving parts.

Vice Chairman Destadio stated he looked many years ago at adding a meter because Peachtree City charges his sewage based upon his water use. He said he wanted to put in a separate meter to handle his lawn sprinkler and that kind of stuff so he could show them. It was not economical for him; by the time he did all the math, actually it was a ten year rate of return. If he had done when he thought about it, he would be okay now, but \$900.00 or \$1,200.00 was the cost for the meter.

Mr. Pope said you also have the cost of the line. Vice Chairman Destadio stated these electronic meter will be more expensive. Mr. Pope agreed they will be.

Mr. Rapson said to keep in mind there are also different charges for irrigating versus not irrigating, and those type of things. There are a lot of entities that have those two meters structured and that is what they have inherited, and what they have found is this one is tied to the sewer so people are not using the consumption, now because of the state law saying we have to manage our water and water usage, if you have that on a separate meter, now they now if you are watering when you are not supposed to be watering. It creates another entire dynamic; and to encourage you not to water your lawn, that rate may be adjusted.

Vice Chairman Destadio said he does not have a problem following the law. Mr. Pope said he touched on something that is important. Mr. Pope stated it will be important for them to be at Retreat because they will talk about that; they will also talk about the rates and how we adjust, if we need to adjust the rates. There will be a technology fee that is associated with that; how we address that will be discussed.

WC3-13-19

Mr. Rapson commented there may or may not be a technology fee associated with that.

### V. PUBLIC COMMENT.

Mr. Holland said he ran into Ted Meeker and Mr. Meeker was very complimentary about Lee Pope and Steve Rapson. He said it just reinforced his thoughts.

Mr. Pope asked if anyone had any questions about the information in the packet. Mr. Holland asked about the date and location for the Retreat. Mr. Rapson said it will be at the Old Courthouse on April 5. The Water System piece will start at 1:00. Mr. Rapson invited the committee to come for lunch if they wanted to. Lunch will be around noon. Mr. Pope said the meeting is open to the public. Mr. Rapson commented they can be there at 7:30 if they want to attend the whole day. The first part of the Retreat will be a recap of where we are financially, then right after they will talk about an update for the SPLOST overview, all the SPLOST projects and Transportation. That will lead into the afternoon which the first thing is Water.

## VI. ADJOURNMENT.

Vice Chairman Frank Destadio made a motion to adjourn the Water Committee March 13, 2019 meeting. Lee Pope seconded. The motion passed unanimously.

There being no further business, Chairman Pete Frisina adjourned the meeting at 8:30 A.M.

	Peter A. Frisina
The foregoing minutes were a the 27 <sup>th</sup> day of March, 2019.	pproved at the regular Water Committee meeting on
Lisa Speegle	

WC3-13-19 9

**Next Scheduled Meeting Date: March 27, 2019.**