

WATER COMMITTEE
AUGUST 26, 2009
MINUTES

MEMBERS PRESENT:

Pete Frisina, Chairman
James K “Chip” Conner, Vice Chairman
Tony Parrott
Brian Cardoza
Jack Krakeel
David Jaeger
Russell Ray
Ted Strickland, City of Stockbridge
Buddy Welch, City of Stockbridge

ABSENT:

NON-VOTING MEMBERS:

STAFF PRESENT:

GUESTS:

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

I. APPROVAL OF MINUTES FROM THE MEETING ON JULY 22, 2009 MEETING.

Tony Parrott made the motion and Vice Chairman Chip Conner seconded, to approve the minutes from the meeting on July 22, 2009. There was no opposition.

II. LAKE MCINTOSH UPDATE.

David Jaeger reported the re-submittal meeting with the Safe Dams Program took place on August 3. It was originally scheduled in July, and Tom Woosley asked that it be postponed about a week. They spent about six hours going through the review comments they had given us and our response to each comment. He stated that he feels like they came out of that meeting with a very good understanding of what his original comments were and our responses to them. He was left with nothing additional that we had to deal with after that meeting. We did not anticipate that he was going to stamp them approved in the meeting and that did not happen.

Mr. Jaeger said that he shared with Mr. Woosley at that meeting that the Water Committee was hopeful that he could complete his review of this re-submittal in possibly a thirty day time period. He did not argue with that, but he did not make any guarantees either. He said that he has heard through the grapevine in the last week, that we are the number one project at Safe Dams. We are at the top of the stack. He does not know if that guarantees anything, but at least we are not in the middle of the stack. He also heard that Ed Fiegley, who is the head of Safe Dams had foot surgery and is out for a while, so Tom Woosley’s duties are spread thinner than usual. They are very aware of our desire to get going and he does not see anything right now that is a red flag.

Mr. Jaeger went on to say that Safe Dams Program has also issued two letters to us. One was the classification letter. Basically, what that means is that any time you have a project like this you submit it to them, they do a classification analysis where

they categorize the dam. In this case, it is a Category 1 dam, and if there is a failure of the dam, there is the potential for loss of life downstream. We knew that chance was very high and even if it wasn't classified that way we felt it was best to design it to that standard. It was always designed as a Category 1; that was not a surprise. There is no issue there, other than their formalizing it and letting us know that they have completed that classification. There was a second letter that was issued basically saying the same thing along with a diagram showing potential flood wave downstream of the dam and the potential for impacting certain areas and structures. That was shared with Emergency Service personnel around this area as well as elected officials.

Mr. Parrott commented that the plans could not get approved for construction until after the classification. Mr. Jaeger stated they have issued an application for permit for operation of the dam. We have completed that document, Mr. Parrott has signed it and we have sent it back to them. We have taken care of everything they have asked us to do so far. We are hopeful they will complete any other review of the information we have given them and issue the permit shortly.

Mr. Jaeger explained that we have put out a request for qualifications for contractors and he has been reviewing them. There are three contractors they are currently comfortable with being qualified; the others he has requested some supplemental information to further their qualification statements. The nature of these jobs is that there is some specialty work that needs to be done. We want to be sure they are qualified to do it, or that they have a sub contractor on their team that has done it before and done it on a Category 1 structure. There were five, and he is waiting on some of the supplemental information to be given to him, he is anticipating these shortly. When he receives that and makes the final decision on those that are qualified he will bring it back to Water Committee. He said that Mr. Parrott would like the Board of Commissioners aware of who is pre-qualified prior to us inviting them to bid.

Mr. Jaeger updated the committee on the access road. There is an agreement between the Airport, the City and the County regarding construction of the access road around the end of the airports new expanded runway area. He stated that he had a conversation with the attorney for the airport; the information he was given is that the county attorney is currently preparing the intergovernmental agreement with regard to that construction. The contractor that will build it will be contracted by the airport and then the cost of it will be divided among the three entities. As soon as that intergovernmental agreement is complete and all parties sign it, then it is his understanding that the contract will be issued by the airport to the contractor; we will then start the new construction.

Mr. Parrott commented that this is an all weather road. They extended their safe zone, finished it and moved two golf course holes. Instead of going straight through now, it goes around their safe zone. We just need this all weather road in time for construction.

Mr. Jaeger stated the road is currently designed just to be an access road; minimal grading, twenty feet wide, crushed aggregate stone and some minimal storm drainage. It is not intended for public access, it is not designed as a finished paved thoroughfare.

Mr. Jaeger reported that currently the fencing contract is in place for the mitigation sites and that is closing up shortly. He has one property issue that needs to be discussed in executive session. He said that he met with the golf course and they provided to us easement documents where the county had agreed, initially in 1992 to allow the construction of Planterra Ridge Golf Course encroaching into the County property and recognizing that it will be built not only partially in the County property, but also within the easements that the County owns for flooding. The County maintains the ability to have the water rise between elevation 780 and 790, and the golf course recognizes that. The areas that we identified as having the golf course encroaching onto the County property are covered by the easement. There were some amendments to those documents later on, they were fairly minor, but the overall easement agreement is in place. There are some areas where the normal pool is encroaching on their operations, cart paths that go under water and that kind of thing. Once we got some people involved with project when the course was built, they had the history, knowledge and understanding of what eventually would be the lake and that they anticipated that they would have to do some changes later. Our initial conversations with the current course managers were unclear in those areas because they did not have the knowledge of the construction of the course. Some other people got involved and everybody understands now.

Mr. Parrott reported that Coweta County discussed our lake and their request for us to do elevation certificates for the property owners around the lake. They are going to send a letter to Fayette County in that regard. Mr. Parrott stated that he thinks it is an expense that the Water System should not bear, because we purchased the flood easement, and the flood easement is platted. There should not be anything in the flood easement, and we should not have to spend money to say that the house is not in the flood easement.

III. HELMER ROAD FENCING.

Mr. Jaeger explained that Helmer Road is one of the mitigation sites for the Lake McIntosh project. At the time we issued the contract for fencing the other sites, that site was not complete; there was some additional land being added to it, so we did not include it in the fencing bid. The survey on the additional land has been completed on Helmer Road so it is a whole site now. He said that he has spoken with the fencing contractor about the potential for a change order to his contract to add that site. They are willing to do that at their bid prices which we feel are very competitive prices. Mr. Jaeger said he did a cost estimate based on the perimeter of the property and added what we thought we might do in the way of gates and access road and those types of things. It is about \$34,000.00 worth of work. We have not had any issue with this contractor; we have worked with him on other jobs, and we

would be happy to have him do this work. He stated that he wanted to bring to the committee the option to add the Helmer Road site to the current fencing contract.

Mr. Parrott stated that using the current contractor, he already has his bid bond and insurance and nobody else can be as competitive as he is.

Tony Parrott made a motion to recommend to the Board of Commissioners to approve a change order to the current fencing contract to fence this site. Brian Cardoza seconded and there was no opposition.

IV. TOTAL ORGANIC CARBON UPDATE.

Mr. Parrott stated the South Fayette water plant is passing the removal ratio currently. However, the Crosstown water plant is now back to being marginal. The raw water TOC at South Fayette came up, the percentage worked out; trouble is, we don't have the same thing at Crosstown. The water quality is too good and we are not making the 35% removal.

Mr. Jaeger said that last week, he and Russell Ray visited a water treatment plant in Arab, Alabama; they have had it in place about a year. They are using MIEX (Magnetic Ion Exchange), which is a process where at the front end of the water plant process they mix an ionically charged resin with the raw water, and it attracts the particulate matter and the dissolved organics to this resin and help it settle out faster. You end up with a very high percent removal of TOCs and DOCs (dissolved organics) which are next to impossible to actually settle, no matter what your process is. If the raw water content has a high dissolved organic ratio of the total organic then the MIEX system works very well. They did a jar test demonstration at the South Fayette plant a few weeks ago. They compared that with the current process that the county uses and again, the results are very good. The benefits of this, in addition to removing more of the organics in your water is that you are left with less there to react with your chlorination to create disinfection byproducts out in your water system. It is twofold, and this is true of any technology, if you can lower TOCs, you get the benefit of less disinfection byproducts and some reduction in chemical use as well.

Mr. Jaeger stated that he thinks he and Mr. Ray both left with the feeling that this is a technology that we need to continue to consider. It performs very well, from what they can tell. The major issues are the cost to operate it; it has a high up front cost, what they looked at was a separate building, quite large, that housed all the basins and equipment for this resin interaction with the water. They recapture the resin and continually recycle it and you do lose some, so there is a constant expense of recharging this resin. The up front cost on that plant was over \$5,000,000.00. That included some land acquisition and the building is probably more than we might need, and the MIEX equipment cost was in the neighborhood of \$1.5 million. Where we would be in that budget number is hard to say at this point, but we are looking at millions of dollars. The plant in Alabama is similar in size to our South Fayette plant; it is a 6MGD plant, also. It is a surface water treatment plant, and is

right on a reservoir. The size and the operation of the plant is very similar to what we are doing. In addition to the up front cost, there would be a fairly high operational cost, they give you budget numbers based on so many cents per thousand gallons treated. On the ride back, he and Russell kicked around some numbers and came up with about \$300,000.00 a year in operational cost. Other technologies don't come cost free, either, so we are in the process of reviewing other things. He said they talked about GAC (granular activated carbon) in the filter, that is an expensive possibility also, and there are other things we will continue to look at. He said that \$300,000.00 a year is something that catches your attention, but when you compare it to everything else, what works and what doesn't, it is hard to say at this point what would be the best option. At least we have an option we can consider as something that will work to the best of our experience so far.

Mr. Parrott mentioned that it cost around \$9,000,000.00 to build the South Fayette Water Plant. Mr. Jaeger said the \$300,000.00 cost estimate is based on South Fayette using 5MGD; it is a 6 MGD plant. The Crosstown plant is 13 ½ MGD plant, even though it would average less than that, the cost will be substantial for that system. Mr. Parrott said we have enough land, the South Fayette site is 78 acres, and the Crosstown site is 30.

Mr. Jaeger went on to say that this system is proprietary, their resin is something that they own. You buy it from them; you contract with them at a certain cost per ton. They say they will enter long term contracts and they will put escalation limits on the price based on consumer indexes and those types of things. He stated that he thinks this is fair. But, the truth is, you are still locked in, you are still contracting with a single source and currently that technology was developed in Australia. Right now, that is where the resin is made. They are talking about having a plant in the southeast. This is a technology that is coming on board, and he thinks we will continue to see more of it. This system gives excellent results. The use of GAC will give very similar results. GAC exhausts itself. The ability for the carbon to absorb the organics over time diminishes, then you have to exchange it for new carbon or you start to lose those organics back into your water stream. You start losing the benefits because you are dumping them back in. Mr. Jaeger stated that either one of these will give us more than adequate results. The results that we have seen with both of them are far below the threshold. He confirmed what Mr. Parrott said that they don't recommend doing anything but treating all of our water with whatever technology we come up with.

Mr. Parrott stated that the Standard changes in 2012; trihalomethanes and haloacetic acid will go from system average to individual locations. He said that Cobb Marietta Water Authority, Columbus and all the bigger ones are looking at doing some type of additional treatment because that standard is so high that you have to do something. Clayton County Water Authority is going to have to do something, we are all ok now, but we won't be ok then.

Mr. Ray commented that a number of places are doing pilot studies. Columbus is doing a pilot on this product. Mr. Parrott said you have this, you have membrane filters; he and Mr. Jaeger listened to a talk by someone from Birmingham where they have fourteen different choices that they looked at; different combinations in order to handle their problem. Depending on what your water is, what works better, what works better with your site set up; this is why it will take a while to make a decision. You don't want to make a decision on this now without considering what we will be doing six years from now; treating 20 million gallons of water a day.

Mr. Jaeger commented on the pilot programs; they have a tractor trailer truck with a miniature water treatment plant in the back and they siphon off some of your flow through their system, a minor amount. Then you can compare the results. There is a cost associated with this; you contract with them to do a pilot study, it is in the neighborhood of \$15,000.00. He said as we get a little bit farther into the review of these different technologies, it would probably be worthwhile for us to consider it at both plants.

Mr. Ray stated that resin will ultimately come out in the filters, if it doesn't settle in the basins. It then becomes part of the sludge.

Mr. Jaeger explained that there is a waste stream off of their system that is separate from the lost resin. When the stuff settles out, it takes all the organics with it. That creates a waste stream. They have a system that allows you to recapture part of it; the resin is in a closed system, basically after it takes everything with it, they are able to break away the resin from the brine and the organics so the waste stream has brine and organics in it. The brine helps with the ion exchange operation; you can spend another quarter of a million dollars to have a system where you can separate again, the brine from the actual organic waste and reduce your waste stream by 60%, but that waste stream, even at 40% is still a significant amount of volume. If you are in an area where you can tie into a sewer line, it is not as big an issue, but if you are not, which we aren't, then we have to deal with that volume of waste. At 100%, he calculated 2,000 gallons a day, you are talking about a tanker truck full of it every four or five days that has to be taken somewhere; and have an agreement for somewhere to dump it like you would septage. There is cost associate with that also; which they factored into the \$300,000.00 per year estimate.

V. MR. BUDDY WELCH, CITY OF STOCKBRIDGE DISCUSSION ABOUT REEVES CREEK MITIGATION SITE.

Chairman Frisina welcomed Buddy Welch representing City of Stockbridge and Mr. Ted Strickland, City Manager of City of Stockbridge. Mr. Welch explained that the City of Stockbridge's sole source of water is wells. They have several productive wells in the Big Cotton Indian Basin; they are in need of additional wells. The City is divided into two sections, the City is responsible for Old Stockbridge; Henry County is responsible for other areas such as Eagles Landing and those particular areas.

Mr. Welch went on to say that they are in desperate need of getting some more wells put in place. Several years ago they hired a company to go around and do testing and so forth. They got permission to go in to Fayette County's mitigation area on Reeves Creek. There is a ridge that runs through that mitigation area. There were two test wells that were done there. Both of them showed they had enough water in them to be productive as far as cost and so forth. These are the same people that helped Fayetteville put in a good many of their wells. They believe the two sites are still viable and what they want to do is acquire about a three acre site. He stated that he has given Mr. Parrott the plats and drawings. Using these drawings he described the location to the committee. The area outlined in yellow is already owned by the City of Stockbridge, the area outlined in blue is Fayette County's mitigation area, plus what is outlined in green. The wells are located in the three acre tract of property. Fayette County has a monitoring well that is located between the two well sites. They just drew a line and took the three acres out, they don't have to have three acres, or they can box it out, if necessary. Mr. Welch stated that this can be done by easements, or by actual title, there are a number of ways to do it.

Mr. Welch said they have previously met with the Corps of Engineers; if they get title to this or an easement, they would have to do some substitute mitigation for Fayette County in order for the Corps to allow them to put in the well sites, maintain them and put in the waterline to carry the water back out to Flippen Road. They are prepared to do that, they have already shown the possible mitigation property that they have in another area to the Corps. They hired Butch Register of Register & Associates, Butch used to be the Corps Director for this District years ago; the Corp was amenable to working with them on some substitute mitigation areas. They basically have gotten the property that they could use for mitigation, they just need to get some clear understanding from Fayette County on what you will be willing to do to help them get those well sites so they can put them into production. They would like to put them into production this winter.

Mr. Welch went on to say that he talked with the County Attorney about this and he said to start here and get the committee's thoughts and blessings and direction on it. He added that they don't have to have the three acres; they can box it out and probably get by with about an acre and half. They will draw it any way Fayette County wants it drawn. As he understands it in preliminary talks, if they took the area with the monitoring well, the Corps would not require that to be continued, but they would have to put in a monitoring well across the creek in the seventeen acre tract. The City would have to spend a good bit of money to make that acceptable to the Corps.

Mr. Welch stated that they need our help and want us to help them get some water. We all know how precious it is. He asked if there were any questions from the committee.

Mr. Jaeger asked if the two sites have already been evaluated. Mr. Welch said they have already been drilled. Mr. Parrott explained that the City of Stockbridge asked permission to drill wells and the permission was given, permitting that the Corps allowed it. The consultant that drilled the wells neglected to get the written permission necessary from the Corps. When the Corps came to do the inspection, they found we had a road and two wells in that no permission was given for; it created a hardship on us at the time, since we were trying to get that site acceptable to the Corps. It just kind of blew up, that is why there are two wells on this site, that otherwise would not be there. He said they are productive and it is a resource that has value to the City. There is a power easement that serves as the property line, and there is a gate that comes in along the power easement; this is the access to this portion of the property.

Mr. Parrott stated that it is seriously wet land. You cannot walk across it any more. To come in to check the fence, there are several locations used to come into the site. Mr. Welch explained that they come through on the Georgia Power easement and it runs all the way out to Flippen Road. It is dry access up to a certain point. As part of the exchange of mitigation, once they release it, they will also have to have the permit to inundate. This will be expensive. They bought the land across from this because they knew they would need it.

The committee and Mr. Welch discussed at length the land needed for mitigation and what the Corps might require them to do, the number of mitigation credits, stream credits and preservation credits that are available, owning the property or having an easement, production of the wells, and how the wells will be operated. No chemical storage will be on site. Water will be pumped by electric pumps out to Flippen Road. Mr. Welch stated they have no problem in indemnifying up front; if they create a problem for Fayette County, they will make it good.

Mr. Parrott commented that there are many additional things that can come up. He listened to a lady speak last night about when they farmers pump their wells down the Flint Basin, that the Flint drops down and there is not as much flow. If they pump here, and it changes the flow of Reeves Creek, it possibly affects the wetland site. He does not know the affects. He stated that water has value and he would consider selling them water.

Vice Chairman Conner stated that he does not see any wrong with it, as long as we are fully covered and protected from the Corps.

Mr. Welch stated that they would make sure it was all done with the Corps, they would have the full responsibility of it. There is no use in them spending all the money for consultants to gather the information, file it with the Corps, do the restrictive covenants, and do the calculations again (they will have to update their reports).

Chairman Frisina asked about the enhancements we have done to this area. Mr. Parrott stated that it is a fully functioning wetland, it has been accepted, and approved. We are at the point that we don't have to do anything to the site. Once a month we go over and make sure the fence hasn't been cut and nobody is hunting. We have to file a report, but two of the monitoring wells are actually under water. Beavers have dammed it up. We have to maintain the fence because the area around it is fully developed.

Mr. Welch stated that they have talked with the Corps about this and they are very familiar with their rules and regulations in doing the substitution and redrawing of all the necessary documents. They will do all that, and run it by Fayette County's council and engineers to make sure they are happy with it.

Mr. Welch stated the two wells produce 150 gpm and 90 gpm. They will have to use both wells to make it work.

Vice Chairman Conner asked if they are not going to add the chemicals at the well, where will they add them. Mr. Jaeger asked if they are not going to chlorinate on site where will that take place. Mr. Welch stated it would have to be a site on Georgia Powers's easement, where the Corps tells them they can or cannot do it.

Mr. Welch described the process involved. They will draw up preliminary plans, they do the preliminary study; their study has to show they will not be affecting the other wetland areas. They will ask the question of whether or not it is going to pull water down and draw all the water out and you don't have any there. All those studies will have to be in preliminary form, then you file it with the Corps and you have a meeting with them, go through the explanation of it. They will say yes, you can go ahead and put it into final form and then we will go through the process of it, or they will tell you no, we don't think we can approve this or we don't think this is acceptable. If they say that, then they just have to stop at that particular point. If they say they will work with them on it, then, they will go ahead and do the final studies, prepare them, they will all be filed in Morrow. Allen Miller and Ms. Deals are the ones they deal with most of all. He said they have been very good to give them their professional opinion. Then, all the studies on the wetlands that we would be exchanging would be updated. They would present it to them, and then go through the negotiation phase, whereby they negotiate out the credits. They will say this has a certain value, whatever we ultimately get from you. Then they will say that this has a certain value and they will go back and forth until they get it settled with them.

Mr. Welch said once that gets settled, then they have to go through the Corps' legal department. Mrs. Wright normally handles these. She is very knowledgeable and very accommodating if she is not overloaded with other stuff. Normally they prepare all the packages for her, where she doesn't have to go back and reinvent the wheel and do it herself. They submit it to her and then she signs off on the legal and once it is signed off on the legal, then it is brought to them, in this case, Fayette County signs off on it. Then the transaction will be done. Then they go in and do

the mitigation requirements on their seventeen acres. Once the Corps signs off on that, then they deed it to us, or the easement, however we work it out. It is a process that would take about three months. Assuming they can get a decision from Fayette County sometime in September, they could get it done by late December, January at the very latest. They already have the wells in there, they would go back and re-bore them and put in the type of casings and so forth, and the pumps. They can do this in about thirty days. They would use the Henry County Water and Sewerage Authority people to put in the line. They will be weaving some of their water through their line a short distance. All that would be coordinated.

Mr. Welch went on to say that they think that if everything goes right, they will be in production by the middle of April, at the latest, the middle of May.

Mr. Parrott commented that everything is based on Corps approval. He suggested asking the Board of Commissioners if they are interested in proceeding in this matter.

Mr. Jaeger asked if they have a timetable in mind for getting the exchange site ready for an exchange. Mr. Welch stated that if they get approval from the Water Committee and the County by September, they think they can get approval from the Corps on the exchange; what the Corps will require them to do to the seventeen acres they don't know until they get into the negotiation phase, but the Corps, since they are a public entity, they allow you to go forward. Henry County is doing a huge mitigation bank on Walnut Creek, about 97 acres.

Mr. Jaeger asked if they will still have mitigation credits associated with this site, if they put the wells on it and use it as water production or will that go away? Mr. Welch stated this goes away, because they will not own mitigation credits. He stated this is hypothetical, the Corps may change it.

Mr. Jaeger asked if there has been any discussion between Fayette County and them about an agreement in which Fayette County would own the wells and sell the water to them at wholesale. Mr. Welch stated no and they do not want to do that. The wells amortize out over twenty to forty years. When you having to pay for the cost of putting it together, and then you have to pay for cost of buying it, it is not economically feasible to do it that way. The way they look at it, we all need water. Henry County has tons of water, plenty of water, they don't really have to turn on the tap here, but it is more economical to turn the tap on, spend the money, amortize it out over twenty years, if you are looking into the future. If you were looking at it today to see if you could get your money back over a reasonable amount of time, you would say no. You would not make a business decision to do that, but this is a public decision to provide that. This is for the public. They would much rather have this themselves and manage it themselves, and not have to buy water from anybody.

Mr. Welch stated that he would go back to his office and prepare an Intergovernmental contract; it will be sent to the County attorney spelling all this out.

Vice Chairman Chip Conner made a motion to recommend to the Board of Commissioners to enter into an Intergovernmental Agreement with the City of Stockbridge to allow City of Stockbridge to develop the two wells at Reeves Creek Mitigation site. Tony Parrott seconded and there was no opposition.

Mr. Welch and Mr. Strickland thanked the Committee for their time and exited the meeting.

EXECUTIVE SESSION:

Tony Parrott made a motion to adjourn to executive session to discuss one item of property acquisition. Vice Chairman Chip Conner seconded and the committee adjourned to executive session. David Jaeger briefed the committee on this item.

Tony Parrott made a motion to recommend to the Board of Commissioners to move forward on this item. Brian Cardoza seconded and there was no opposition.

There being no further business, Chairman Pete Frisina adjourned the meeting at 9:30 A.M.

Peter A. Frisina

The foregoing minutes were approved at the regular Water Committee meeting on the 23rd day of September, 2009.

Lisa Quick