WATER COMMITTEE APRIL 22, 2009 MINUTES

MEMBERS PRESENT:

Pete Frisina, Chairman James K "Chip" Conner, Vice Chairman Tony Parrott Jack Krakeel Brian Cardoza

NON-VOTING MEMBERS:	David Jaeger
STAFF PRESENT:	Russell Ray

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

I. APPROVAL OF MINUTES FROM THE MEETING ON MARCH 25, 2009.

Vice Chairman Chip Conner made the motion and Brian Cardoza seconded, to approve the minutes from the meeting on March 25, 2009. There was no opposition.

II. LAKE MCINTOSH UPDATE.

David Jaeger reported that he is still working with Safe Dams Program for the review of the plans. He has had three meetings with Tom Woosley from the Safe Dams Program. Essentially, Mr. Woosley is giving us a little bit of special treatment, meeting with us to go over the plans and the specifications, sort of on a personal basis instead of him having to weed through it on his own and learn the job from scratch. He views this as a positive; they have also talked about our hopeful schedule to start work sometime in the summer. He was supportive of that. The Safe Dams Program shies away from guaranteeing or giving us a date when they will approve things, but he feels like all this is positive. They are extremely short handed and have a large backlog of projects. This being a drinking water supply reservoir, he does give it priority. Mr. Jaeger stated that he continues to be hopeful that we will meet our schedule.

He went on to say that we have also gotten an email correspondence saying that the Corp of Engineers visited the Magnolia Swamp mitigation bank on March 20 for their annual inspection of the areas that have been planted for the release of mitigation credits. As far as we know, there are no issues with that visit. Currently we are waiting for them to issue their report and then at that point the mitigation bank is clear to release the credits.

Mr. Parrott explained that the mitigation bank credit release is directly related to the schedule that the Corp put in the 404 permit. Even though we might have the plans approved for the dam, we could not bid the project.

Mr. Jaeger proposed that we proceed with a pre-qualification of contractors for the project, so that when we actually do issue the plans and specifications for bid we are dealing with contractors that we know are qualified for the project. We have done this on other major projects in the past. He thinks the timing is approaching for us to issue a request for qualifications and then we can review that, pre-qualify the bidders that we believe are appropriate for this scale of project and type of project. He almost feels like it is even more appropriate in this economic environment where there are a lot of people looking for work. You don't want just any grading contractor to build the dam. It is important that we have a quality contractor. This would be similar to an advertisement for bid, only it would be an advertisement for a request for qualifications.

Mr. Jaeger stated that we would suggest that they have an experience record on a project of this magnitude and this type that they can provide to us in the qualification packet; and they are on a large enough scale that they can handle a project of this size, that they have the work force and equipment and their performance is good.

Mr. Jaeger went on to discuss the access easement into one of the mitigation sites. This site is owned by Mr. Johnson in Meriwether County. At the time the County negotiated the easement into this property Mr. Johnson was aware of the easement; what he was not aware of was that the County would ultimately intend to have an all weather drive through there. He is concerned, number one, his house is on the upper left hand portion of this site; he is concerned that this gravel drive is going to run pretty much through his front yard, as he calls it, it is more of a pasture. Number two, it will be in his pasture where he is actively using it for cows. At the last Water Committee meeting we discussed his suggestion that we try to use his existing driveway instead of build a new one, or use the easement without the stone surface. Neither of those seems to be a likely solution to the problem or something the County would want to do long term. In talking to him further he then suggested that if it needs to be an easement and needs to be a stone access road that the easement be moved to the eastern end of his frontage off of McClain Road. This would push it farther away from his house and also get it more out of the center of his pasture area where he currently is using the land for his cows.

Mr. Jaeger referenced a sketch for the committee to view the new location for the easement. It would be a cost savings to the County from a construction standpoint. The access road is 12 foot wide crushed stone, and it is about 300 feet shorter to go the second route. This equates to about \$4800.00 based on the current contract with the fencing contractor. There would be the need for an additional gate. The gate that is currently there is located at the entrance to the existing easement off McClain Road. We would have to add another gate at the second easement location, but that is a \$300.00 item. It is not a big deal. There would be some cost to resurvey and it would have to be re-recorded. It would take Board approval to swap the easement location.

Mr. Parrott commented that we benefit by no longing having to access this property going across his dam for his farm pond.

Mr. Jaeger stated that Mr. Johnson, so far, has been very accommodating to our survey crews and to the environmental people with Eco-South, even in talking with himself about it. He said he thinks it would be nice to keep things on good terms with him. He is going to be the neighbor of this site for the County for a long time, probably. If this is something that can be worked out, have him be a little more happy with the solution and serve us just as well, he is for it. It is just a matter of the formalities of getting it changed.

Vice Chairman Conner made the motion to recommend to the Board of Commissioners changing the easement location on the Johnson mitigation property in Meriwether County. Chairman Frisina seconded and there was no opposition.

Mr. Parrott commented on the sign in the package to be put on property pins at Lake McIntosh to keep the neighbors from clear cutting. He showed pictures from Lake Kedron taken last week, a property owner decided to clear cut the county property and burn the brush. They cut the under brush and cut up trees. Marshal Hobbs made him put what he had loaded on his truck back.

Mr. Parrott went on to say that this is not a situation where somebody went in a buffer, the property they own is also a buffer or an easement. This is a person who went on County property and cut trees down. He has spoken to this customer before. Part of the tree he had in the back of his truck was cut down by the County because it was dead and was leaning across the golf cart path and it was a hazard. We cut it down, but did not haul it off; we left it on County property. They have already started this same type of thing at Lake McIntosh. The problem it really gets down to is that DNR expects you to maintain the buffer around the drinking water reservoir. Several years ago, it got so bad at Lake Kedron Dr. Patton took pictures to some Peachtree City city council members and they had some silt fence put up. Peachtree City maintains part of the buffers because it is City property, the location he is talking about today is actually County property and not the buffer.

Vice Chairman Conner commented that he spoke with a man that lives on Lake McIntosh this weekend and his neighbors are just cutting away, almost clear cutting. He wonders if we need to post rules some place where they can be seen immediately, rather than the park, since the park does not exist at this time.

Mr. Parrott stated that we can send a notice to all the property owners around Lake McIntosh. Mr. Krakeel said the fundamental problem that he sees is we don't allow them to do it and they go ahead and do it. We cite them and what is the fine? Mr. Parrott said he does not know; what is it worth to someone living there. Mr. Krakeel said once they clear it the damage is already done. We need to set the fine high enough to make people think twice about clear cutting the land in front of their

property. If you put a \$10,000.00 fine or \$25,000.00 fine for clear cutting the property. If you post and send notice that we are required to maintain this buffer by the State Department of Natural Resources rules and regulations as a buffer around a drinking reservoir, violations of the buffer may result in fines up to \$25,000.00 per violation, then you start grabbing peoples attention. If it is a civil matter, they go to State court and they pay a local ordinance fine of \$500.00 or \$1,000.00, first of all the folks who live around the lake can afford to pay it. Whatever the process is, there is not enough enforcement action currently to prevent people from doing this, in his opinion, and the only way we ever control it is to make the pain and suffering of doing it large enough, so that people think more about it. He suggested that we research and discuss it with the County attorney. If we are going to prevent this from occurring in the future, he thinks we have to make the penalty so stiff that it grabs peoples attention; send a letter out and let all property owners know, not only are these our regulations, but these are State regulations that we have to comply with. We can be fined if we allow this to occur.

Vice Chairman Conner commented about a guy on Lake Peachtree; every 4th of July he clears it right down to almost bare ground, they fine him, he pays it and has his party and enjoys the fire works.

Mr. Parrott mentioned this is why he talked to the Water Committee previously that he would run a 6 foot chain link fence from property pin to pin behind this guys house and leave the 6 foot ragged rusty chain link fence up until it grows back. It is one of the biggest problems we have around the lake, even at Lake Horton. What bothers him the most about this situation is that it is County property; the man knew it was County property and did not care. The committee discussed what undisturbed means. Mr. Parrott stated that one hundred percent of the buffer around Lake McIntosh is owned by the County and should remain undisturbed, so that we don't have to worry about herbicides, pesticides and run off. We ought to be able to have a quality drinking water reservoir; we are not building this for recreation.

Mr. Krakeel commented that at Corp lakes they allow you to prune up to 15 feet high off the ground, you can cut anything down that is very small. You are only allowed to do it on 50% of your lot, and every time the lot is sold, it gets reduced by 50%. Once it sells three or four times, you are down to ten or fifteen feet and it is a walking path basically to a boat dock or something like that. Then you are not allowed to disturb the rest of it, they even come out and take pictures.

III. WATER TANK DISCUSSION.

Mr. Krakeel stated that he has a meeting with them the first workshop in May. They are going to invite some people to come listen to the discussion. The Board of Education wants the Board of Commissioners to have a public meeting. He will be at the workshop to answer any questions that were not answered previously.

IV. WATER RESTRICTIONS UPDATE.

Mr. Parrott explained that he sent a letter asking to be allowed to go back to non drought period restrictions. He spoke to the State and asked when he would get a letter. They told him that he would get a letter, but he will not get approval. Their drought plan says that after the drought is over, you have to have three months of normal rain fall before they will release anybody. He asked that if we could have a IVC which we are under currently which is not in the drought plan, why can't they have a IIA which would allow us to go back. They were not willing to do that. This will work out to be July 1, the start of a new budget year.

V. PRESENTATION 2008 COUNTY WATER QUALITY MONITORING REPORT.

Mr. Parrott reported that to comply with the Metropolitan North Georgia Water Planning Districts stream monitoring Fayette County, the City of Fayetteville, Peachtree City and Peachtree City Water & Sewerage Authority got together and contracted with Integrated Science and Engineering do the necessary water quality testing county wide in order to comply with the 2008 requirements. Stream monitoring for chemical, fish, invertebrates, wet weather monitoring, dry weather monitoring was done; we did everything. There is nothing out of the ordinary or anything that you would not have expected out of the entire report. Because the Water System tests seventeen sites every quarter anyway, we knew what those were going to be. These were additional sites we had to have. It also takes care of some storm water management testing that is going to be required. We have a background, and then the Planning District cut back on the sampling so this years sampling won't be near what this last one was. Mr. Parrott stated that if anyone on the committee has an interest he will be glad to get them a copy, or they can review the one he has. The good news is there were no hot spots. The county rules for soil and erosion are good, and everybody worked together on this project and it saved all of us some money.

VI. <u>AIR CONDITIONING FOR CROSSTOWN WTP AND FLINT RIVER</u> <u>PUMP_STATIONS.</u>

David Jaeger reported the bid opening was on April 7, 2009. There were only two bidders. This is for air conditioning to be added to the Flint River pump station and at the Crosstown Water Treatment Plant finished water pump station at the Crosstown location. Low bidder was Powers Heat & Air at \$70,496.00. They are a local contractor. This is a little different than some of our normal projects, where you have general contractors bidding. He thinks bonding may have prevented some of the subs from being able to bid it. However, this bid price is really right on the pre-bid estimate. From a dollar standpoint, we are comfortable with that and we think it is something that really will benefit the pump stations in the hot months. He recommended awarding the bid to the low bidder. Mr. Parrott stated that as technology has changed and we have had to change out the soft starts the heat in the buildings has caused some problems.

Vice Chairman Conner asked about redundancy in the system in the event that the air conditioning goes out. Mr. Jaeger stated these are not dual units. At Crosstown the finished water pump station has units on each end. There are two units there, so if one went down, you would still have half the capacity, not 100% backup. The one at Flint is a single unit, it is a smaller building and it is more square shaped as the Crosstown pump house is long and rectangular.

Mr. Parrott stated that we have a maintenance contract with a Heat & Air company that gives us after hours and weekend service. We get good service from them. The reason we have that is because the Lake Horton pump station, which is the biggest supply of water we have is air conditioned. We wanted to make sure that we had somebody that would come on a Sunday afternoon. Even though it has multiple units we don't want to take chances. We have never had a problem with them showing up. Admittedly, we do pay them Sunday afternoon rates, but we have somebody that will come.

Jack Krakeel made a motion to recommend to the Board of Commissioners awarding the bid to the low bidder Powers Heat & Air at \$70,496.00. Vice Chairman Conner seconded and there was no opposition.

VII. NOTICE OF VIOLATION.

Mr. Parrott reported that we have a notice of violation which requires public notification within thirty days because we had inadequate DBP Precursor Removal. This means we did not remove enough Total Organic Carbon from the water. The standard is, they have a percent ratio removal that you have to do. Our ratio removal rate was 0.94 and 0.93 instead of being greater than 1. Basically we have to remove 35% TOCs. From the South Fayette water plant we did not remove 35% TOCs. We have to use DNR's public notification form and we have to use the language that EPA generated. Mr. Parrott read the specific language out loud. "Total Organic Carbon (TOC) has no health effects. However, TOC provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the Maximum Contaminant Level (MCL) may lead to adverse health effects, liver or kidney problems, or nervous system effects and may lead to an increased risk of getting cancer."

Mr. Parrott went on to say that we did not violate trihalomethanes and haloacetic acids. We only violated the TOC which has no health effects. But, this is the notice that we have to send to our customers. As part of their public notification, under what should I do, the notice they provided says there is nothing that you need to do at this time. "Residents should not be alarmed and do not need to seek alternative water supplies." Why scare them with those other two sentences? He referenced

the March 2009 TOC summary sheet from the South Fayette water plant. Each month we send a sample to EPD, and ASI (private lab). We test a sample in our lab the same day. We know what we think we have when we send it to the State. On the fourth day of March, we sent a sample that we showed was 43% removal. The State sample tested with 28% and he said he does not have ASI's report yet to know what their results were. But, it would be different because they are all different. There is no rhyme or reason to removal. He referenced Filter 7 on the report for the 21st; they should have run another sample that day.

Mr. Parrott went on to say that we used to have trouble with the Crosstown Plant. Now, Crosstown is having no trouble at all and South Fayette is. One hundred percent of the South Fayette water comes out of Lake Horton. It is not passing. We have tried, when we first had the problem in 2004 and 2005, installing in filter 7 GAC (graduated activated carbon) to see if it got better results. It will give better results for about six months, which would be an option, but to put it in the filters at South Fayette for six months would cost about \$250,000.00. Then you have to either regenerate it or replace it. We also have the option of enhanced coagulation, and we are going to look at that. There is also a different method of testing for TOCs which is called SUVA (acronym). Clayton County Water Authority is certified to run the tests and Mr. Parrott said that he has contacted them. Mike Thomas, their General Manager has agreed that they will run some samples for us to see if running that type of test instead of the test we have run by the State gets us closer. That is why they run it, because they are working the Flint River Basin also; they are working the same water.

Mr. Parrott explained that we test daily TOCs from the Flint River and you can tell when they bump up to 9 and 10, but that is not that far out of line that we shouldn't be able to treat it. Again, we check it 23 out of 30 days with no trouble. The reason it is a treatment technique instead of a maximum contaminant level is that they could not come to grips with having it as an MCL. They cannot test it that accurately on a regular basis.

Mr. Ray explained that another example of a treatment technique is the measurement of turbidity removal, how well we remove particles from the water. An example of direct measurement is chlorine residual, where we can have chlorine in the water up to a maximum level. Because TOC removal occurs in the treatment process, EPA developed a treatment technique. The level of treatment varies based on the alkalinity of the water. It is not a set target like a MCL. According to which category the treatment plant falls in (low alkalinity, medium alkalinity, or high alkalinity), the removal amount is different. With chlorine the maximum level is the same for all plants. EPA had to develop a rule that would apply with every plant's source water.

Mr. Parrott commented that you can get your 35% removal and be 2.1 and pass, you can have 35% removal and have 2.4 and pass. It has to do with the removal

ratio, so you can actually have one plant higher than the other plant; one passes and the other doesn't.

Mr. Parrott stated that this report is for the two quarters ending September 30 and December 31, 2008, then the quarter ending March 31, 2009 we did not pass again. There is one test once a month that the State runs and this is the results used. He went on to say that several years ago we ran TOCs on the finished water at the Crosstown plant every hour for 48 hours. It just depends on what time of day, and the flow of water. We thought we had it handled by doing the additional sampling, but we know what we have and have a good idea of what we are sending in. It just doesn't always work that great.

Mr. Parrott stated that we have 30 days from the date of our notice to send out the notice the customers, which was April 17. We can include an explanation of our own, but Mr. Morris with EPD will have to read it first.

Mr. Parrott said that we are passing trihalomethanes and HAAs that are listed in the notice. Mr. Ray stated that we are meeting those parameters on a running annual average. We are meeting the regulation and passing. We are in compliance; however that rule is going to change. We will be reviewing the rule change this year and will evaluate how it is going to affect us. The rule will be based on a locally running annual average. Every sample location will be evaluated separately versus an average of all the samples together. It all works together; TOC is a precursor for the THMs and HAAs.

Mr. Jaeger mentioned that we are being penalized for having cleaner raw water. Trying to get that same reduction from the cleaner raw water is more difficult than if you had a higher TOC level in your raw water. You could easily get the percent removal, but the end result may be worse than what we are doing, which is in violation. Is there a way to convey that to the customer to say what this penalty is about is about a percent removal limit, however, the actual concentration of the end treated water is below some other average levels?

Mr. Ray explained that we don't meet the percent removal in the case we are talking about, but we do have alternate criteria that we can meet. That is what we are doing, primarily at the Crosstown Plant. Part of the time we don't get the 35% removal at Crosstown, but the water has a lower TOC going in, so we haven't had to meet the 35% removal. EPA has built in, that if you are 2.0 or below on the TOC concentration, whether it is source water or effluent, you still meet the rule. That is what we have been doing at Crosstown without any real problem. He said that is the other side of the coin to what Mr. Jaeger is saying. We ought to be able to get some compensation for not being able to meet the 35% because the water is already so clean. They do have that built in with the alternate compliance. That is something we have come to understand very well over the last year. It was becoming an issue for us; with meeting the 35%, even at Crosstown. As we read through the reg closer and EPD helped us to understand, an annual average on the TOC effluent from the plant is an alternate way of meeting the reg. We have been doing that. We have a lower TOC on our source water at Crosstown. Using the alternate criteria we are able to meet the regulation. We can't always meet it with just removal at Crosstown.

Mr. Ray stated that what has happened at South Fayette is we typically used to meet the criteria for removal. However, we are not getting that removal and our effluent TOC has crept up to about 2.0. He does not know if it is because of the dissolved TOC and the coagulant is not removing it; that is a possibility. He speculated this is something about the drought, and the TOC coming into the plant is higher since we are pumping from the Flint River. The TOC coming into that plant is higher than at Crosstown. We are getting some changes as the source waters are pumped. It is having an effect on the TOC at Crosstown being lower, versus at South Fayette. We used to be able to remove South Fayette's TOC.

Mr. Krakeel asked if we need to look at hiring a consultant to come in and look at our treatment techniques to see if there are things that we can do. Mr. Parrott commented that the option with the enhanced coagulation, Mr. Morris offered to have one of their staff from DNR come look at the plant and evaluate it. We are going to have one of their staff come down and look at it. We are not the only place having this problem. We are going to look at the advanced coagulation to see if that will work, also look at the SUVA to see if that will work. We are very close; we are talking 2.1 and 2.2.

Mr. Jaeger commented that he will be attending the annual American Water Works Association Conference in June; and he will make it a point to investigate new technologies that address TOC removal. We have looked at it in the past and GAC was sort of the front runner at the time we did it. We had filter 7 that was really dictated by a failed filter bottom, not because of the media, but when we put the media back, we decided to do a pilot test with the GAC. The answer was that it worked really well. The life of the GAC is short, it is very porous and those pores help attract and capture these TOC particles, but eventually they fell off and you lose that effectiveness. So, based on that pilot program we determined that is very successful, but it is going to be very costly in the long run to replenish or replace that GAC every time the effectiveness goes down. He went on to say that there was another product on the line at that time, Miox. It was a sole source technology that was also very expensive; this was in 2005. He said he can make an intensified effort at the annual conference to talk to some of the vendors about new technologies and how they are dealing with TOC removal and see if there is something that would be applicable in this plant.

Mr. Krakeel asked if this is the first time we have had to send this notice out? Mr. Parrott replied, yes. He said that we had to do a notice in the CCR several years ago about a sampling error, but other than that we have never had to notify the customer about any kind of problems.

NATIONAL DRINKING WATER WEEK

Mrs. Quick announced that we will celebrate National Drinking Water Week May $4 - 10^{\text{th}}$. Plant tours will be available. Mr. Parrott commented that we don't get as many plant tours as we used to, especially from the schools because their travel budgets have been impacted. The biggest groups we get are three or four home schoolers.

ONLINE PAYMENTS

Mrs. Quick reported that we started a week ago Monday. We have had about 75 payments, over \$6,000.00 worth of payments made. The customers and the staff are very happy with the new system and it has gone very well. There are a few that do not want to pay the \$3.95 convenience fee, but overall it has been received well. It is another payment option available to the customer. Mr. Parrott mentioned that the reminder notice for cut offs has been modified to add this new information of how you can pay at the bottom of the notice.

Mr. Krakeel stated that he received a call from Merchant Capital this week that the spreads in the bond market have come back down. He will probably be talking to them this week as well about a bond issue for the Lake McIntosh project. They just did an issue for Coweta County last week, they issued \$20,000,000.00 worth of bonds and the effective interest rate was 3.8%.

There being no further business, Chairman Pete Frisina adjourned the meeting at 9:15 A.M.

Peter A. Frisina

The foregoing minutes were approved at the regular Water Committee meeting on the 13th day of May, 2009.

Lisa Quick