

**WATER COMMITTEE**  
**MARCH 26, 2008**  
**MINUTES**

<b><u>MEMBERS PRESENT:</u></b>	Pete Frisina, Chairman Tony Parrott James K “Chip” Conner
<b><u>NON-VOTING MEMBERS:</u></b>	David Jaeger
<b><u>ABSENT:</u></b>	Chris Clark, Vice Chairman Jack Krakeel
<b><u>GUEST:</u></b>	Commissioner Jack Smith

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

**I. APPROVAL OF MINUTES FROM THE MEETING ON MARCH 12, 2008.**

Chip Conner made the motion and Tony Parrott seconded, to approve the minutes from the meeting on March 12, 2008. There was no opposition.

**II. LAKE MCINTOSH UPDATE.**

David Jaeger stated that he has good news to report. We have received a copy of the letter from the Corp of Engineers about the mitigation bank approving the release of the first batch of stream credits that will put us over the limit necessary for our timbering operation. He had some discussion yesterday with Chairman Smith and Jack Krakeel, and he thinks the county is going to make an effort to expedite the payment process between the county and mitigation bank to actually secure these credits. With that information, and with the letter in hand from the Corp, he will proceed with issuing the contracts to the timbering contractor and the notice of award. Within a short period of weeks, we ought to have him on site and have that contract underway. That is all very good news.

He went on to say that the archaeology folks are on site now. They have begun their recovery phase. They have negotiated the right to access the site through the Candler’s property on a three day a week basis. They have found another place to cross the creek the other two days of the week. He thinks they are looking at a six to eight week duration, depending on what they find and what the weather is.

Mr. Jaeger next discussed stream monitoring. He stated that he reported to the committee last time that we have the need for three monitoring stations, two upstream of the reservoir and one downstream. The upstream locations are at Shoal Creek and Line Creek. Shoal Creek is in place currently on the bridge at Highway 54 and the Line Creek station will be in the easement on Peachtree City property within the Southern Conservation Trust as well as the need for a small easement on the Candler property. They have prepared plats for those easements

and they have been given to the county attorney. He has given him the contact information for the Candler's as well. He believes that is under way.

Mr. Parrott commented that he spoke to Mr. Candler because he wanted to know details. We will have one four by six post with a wire sticking up on their side of the creek. This wire is for them to pull a high flow monitoring device across. There will be no need to cut any trees or anything else, the pole will be eight feet tall and will be about three feet in the ground. We will not have separate access. The USGS will just go across the stream there and dig the hole. They will use interns to do the work.

Mr. Jaeger reported that he and Mr. Parrott met with Brian McCallum from the USGS about the downstream station and they picked a site downstream of the dam that Brian was satisfied with. Once the timber contractor gets started Mr. Jaeger said he would have him clear a small area that will allow them to set up their gaging station there. That station, in addition to stream flow also monitors some other parameters of the stream such as temperature, pH, turbidity, and dissolved oxygen.

Mr. Parrott said he got the contract from them yesterday and it will be given to the Board for the Chairman to sign. It is \$44,040.00, with the set up charge and the yearly monitoring. It covers one year, but half of it is initial installation along with the yearly maintenance. Mr. Jaeger commented that the benefit of going with USGS on these stations is that all the data will become readily available on the internet. It will be fairly instantaneous, as he understands it. There is much less likelihood of the State or the Corp questioning the results, if we were to try to do this independently; it also falls in line with the other information USGS is providing to the county at Flint River. It broadens the scope of services USGS is providing for the county.

Mr. Jaeger reported that the search for borrow is still ongoing. Our geotechnical folks have searched most of the shoreline within the lake bed. The sources for material within the lake bed are spread out. There has already been a significant amount of borrowing that has been done in this lake, previously. He believes it was done previous to the county owning it. On some of the aerial photography on the soil maps that were dated in the 70's it actually shows areas that were actively being disturbed for borrow operations. The end result is that we don't have a concentrated single area to get dirt for the dam construction. That is why they spread out and they are continuing to work on some other options to try to minimize the hauling distance that the contractor will have to deal with and obviously, the associated cost with that. He feels like we are getting close as far as the quantity we need, but we are trying now to find additional sources in the area closer to the dam that may diminish the cost associated with hauling.

Mr. Parrott reported he attended the pre-bid conference for the fencing of the Helmer Road wetland site so we can fence between it and the adjoining subdivision that is being built. We are continuing to work on that. When he was out there

yesterday, he found some mistakes that we need to look at. Mr. Frisina said he has the plat and the committee reviewed the plat and discussed the situation. He has asked for the legal description on the property. Mr. Parrott said the easement for the wetland site now goes through the amenity area of Stillbrook. County access has been staked coming across existing wetlands and we need to look at it.

Mr. Parrott explained that Mr. Johnson, at one of the wetland sites wants to talk about a swap with part of the property that was purchased, swap different property with it, so he can access what he has that is being cut off with the lake. We don't have a plat on it, yet. When acquiring the property from him, it appears that we cut him off from the other side of his property on each side of a farm pond. He wants some kind of access across the dam to get from one side to the other.

Mr. Jaeger commented that once the surveyors staked the area the County had purchased as mitigation property, his understanding is it insulated him from crossing one side of his property to the next. The surveyors have prepared a conceptual plan where there would be a swap of a minor amount of property to give him back the area that would give him his access. The County would get an equal area adjacent to the existing area the County owns and denote that change in the wetland mitigation area. He talked about it with Eco South and they don't see any problem with it, because it is so minor. It is just a swap with one piece of land with the next. He thinks it is a matter of confirming in the deal with him exactly what is proposed for the swap, so that he is satisfied.

### **III. UPDATE ON DROUGHT SITUATION.**

Mr. Parrott reported that we are still pumping out of the Flint River and Whitewater Creek into Lake Horton. Lake Horton is 4.25 feet low, we have gone from 10 ½ to 4 ¼ . If we don't get a little shower soon, we won't be able to run two pumps. Lake Kedron is full. There is a trickle of water over the spillway. Part of that is because we have used less water from Kedron lately. We have managed to run the plant off of Lake Peachtree and Line Creek and Whitewater. We are only producing 6.3 million gallons a day. We have also continued to make the governors 10% reduction each month. He expects we will meet it this month, also. The Board approved the changes that we are allowed to have for the watering. We have gotten a lot of calls about it. People want to use their 25 minutes to wash their dog, or wash the truck, or wash off the house. These are not options.

Mrs. Quick reported that we got our first report from the District on the toilet rebate program. There were eight customers, with fourteen toilets. The total credit to customer's accounts was \$900.00. We have given out 218 water saver kits, part of them were given out at City Hall in Peachtree City. The others were given out at the office on McDonough Road. She also said an insert has been put in the water bill with information about the water restrictions, and the information is posted on the web site.

#### **IV. BID OPENING – FLINT RIVER PUMP STATION ADDITIONAL PUMPING CAPACITY.**

Mr. Jaeger stated the bid opening was March 6 for additional pumping capacity at Flint River pump station. There were four bidders and they are all qualified bidders. They have all done work for the County in the past. The low bidder was All South Constructors at \$372,203.00. All South has done quite a bit of work for the county and they are quality contractors, and he has no issue with them being low bid. Normally, he would recommend awarding the bid to them at this meeting. He proceeded to explain the history of this pump station and the purpose of this bid. The pump house was originally designed based on the withdrawal permit that the County had at that time on the Flint River, which was 10 million gallons per day. This was in 1996. It was designed with two pumps, each one capable of pumping 10 million gallons a day. Basically, you have a pump and a spare that would be run alternating on one and then the other, if you have the second pump with a spare back up situation.

Over time, the County was able to negotiate increased withdrawal and the permit was increased. Currently the permit is 16 million gallons a day. The original construction and the original permit was never designed for 16 million gallons a day withdrawal. It was believed; at the time the original permit was issued, that would be the maximum that we would ever get. He went on to explain that it was designed so that two pumps would not be allowed to run at the same time. It was a lock out situation set up, so that if one pump was running and an operator initiated the second pump, it would not run concurrently. If we move forward to our current situation, over that period of time, both pumps have been rebuilt, due to normal maintenance. Most recently, the second pump was put back on line, and during that operation the County had some modifications done to the electrical system to allow both pumps to run together. We knew that we were pushing the threshold of the electrical system because it was designed to run one at a time, but we were successful in getting both pumps to run together.

Prior to them actually going on line, he did some calculations based on the original pump design to determine what the capacity of both pumps running together would be. In a pumping situation, you don't just add the capacity of a single pump to the second pump, because you are increasing the friction loss through the line at a higher velocity. So, you end up getting less than double of the one pump capacity. He still figured, based on his calculations that we ought to be close to the 16MGD, somewhere over 15, which we thought was adequate. Now that we have the two pumps on line, we are not getting that. We are only getting 12 ½ and we have done a lot of work in the field looking for closed valves and other obstacles that might cause us to not get the flow that we are expecting. Another factor is that these pumps have been rebuilt, the calculations he is doing are based on original specifications, original pump curves. A rebuilt pump doesn't come with a pump

curve, so he doesn't have a true representation of what these rebuilt pumps are capable of, other than what we are seeing. The intent of this new contract was to provide a third pump, so we could run two pumps, and have a spare. The third pump being the same size as the original two pumps, and if we were getting over 15 for two pumps, we are running now, there would not be any issue. He would say go ahead with this contract, but he thinks we have some more investigation work to do on the existing conditions, before we spend this money to put in a third pump and not get closer to our permitted withdrawal amount. Mr. Jaeger went on to say that we need to do some field testing of the pumps in their current set up. We need to check the calibration on the flow metering, maybe bring in independent metering to check every variable, to make sure that the readings we have are accurate and if there is a reason why we are not getting the performance we think we ought to out of the first two pumps, we need to establish why. Then, if this is all we can get out of these, we probably need to look again at the third pump, maybe come up with a different design to allow us to get our permanent capacity, not settle for just over 12 MGD. Running three pumps together is not an option. You lose too much efficiency and performance trying to add the third pump. That does not factor into it. Mr. Jaeger stated, for those reasons, his recommendation right now is to hold off on awarding the bid. He can talk to All South and see how long they are willing to hold their bid price, if we were to resolve this quickly. Normally, it is a sixty day period. He does not think it makes sense, now, to move forward until we spend more time investigating what is going on with the first two pumps. Since we have been in the drought and we have needed to run these pumps, pretty much non stop, we haven't wanted to do a lot of starting and stopping. We haven't really played with the pumps other than just check the valve situations that might not be fully open. As we get out of the period where the flow in the Flint will allow us to run both together we can start doing some testing. He recommended holding off on making a recommendation for award on this contract. Try to spend a little more time figuring how we can maximize the current two pumps, or determine whether or not this is actually the most we can get.

Mr. Parrott mentioned that the third pump will be set at a variable speed; our thought was, when there is not 16 MGD available, we could ratchet down on the second pump to 14 MGD or whatever, so that we could absolutely get what is there out of the river that we are allowed. Right now, we can only turn one on and one off; that is the only choice we have. We either get 12 ½ or we will get 8 ½. That is our only two choices. With this pump we would have a wider range of choices until we started up both pumps and found out something is not right. The waterline size is big enough. We have had staff working on it, but haven't been able to come up with the answer because; one reason is we haven't been willing to play with the pumps. Both of them have been running for 25 days without being shut off.

Mr. Jaeger commented that they also feel that one of the reasons we might lose performance on a pump would be if you had sediment build up in the line. Especially on a raw situation, but even with one pump running, the velocity in this line is fairly high and even if it had been off line for a while and we had some

sediment drop out, over time the velocity would scour that out. Now, with two pumps running for almost a month, with a fairly high volume velocity, we don't feel that sediment is an issue. We also had a culvert project a few years ago on Hampton Road that required that a portion of this line be lowered. He talked with his inspector, and he is going on his memory, but he did not remember there being any significant sediment in the line at that time when they cut into that line and lowered it down. That would have been in a spot where it would have accumulated, it was a low spot in the line where this culvert was coming in. That is one thing that they looked at and discussed, but really don't feel that is a major issue. Checking the calibration on our meter is the thing we need to do. It is possible we are getting what he thinks we ought to and we don't know it. It is also possible we are getting exactly what the meter says. We need to look at all the factors, and determine are we really getting what we think we are getting out of this pump, or are we getting less than we should. It is probably time for recalibration anyway.

Mr. Parrott explained to check the Flint River meters we can't always check the raw water meter from the Flint because we can't turn the pump on without violating the permit, even to test the meter. Mr. Parrott explained the reason the permit is higher now is because the State increased how much we had to release downstream to Griffin. At that time, we were able to get them to give us more water when it was available, since they were going to increase the amount of time that we couldn't get water. Now that we have the USGS real time monitor on the bridge, instead of a staff gage, we are able to manage the time the pumps run a little longer.

This item was tabled until a future meeting.

There being no further business, Chairman Pete Frisina adjourned the meeting at 8:35 A.M.

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Peter A. Frisina

The foregoing minutes were approved at the regular Water Committee meeting on the 23rd day of April, 2008.

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Lisa Quick