WATER COMMITTEE APRIL 23, 2008 MINUTES

MEMBERS PRESENT: Pete Frisina, Chairman

Chris Clark, Vice Chairman

Tony Parrott

James K "Chip" Conner

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

GUESTS: Commissioner Jack Smith

Larry Turner, PTCWASA

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

I. APPROVAL OF MINUTES FROM THE MEETING ON MARCH 26, 2008.

Tony Parrott made the motion and Chip Conner seconded, to approve the minutes from the meeting on March 26, 2008. There was no opposition.

II. LAKE MCINTOSH UPDATE.

David Jaeger was happy to report that we finally have a timber contractor on site doing some work. He has been working near the dam site almost a week. He hopes to be complete by the first of the year. The strategy is that they don't dump all the timber on the market at one time. He is not certain whether he will work continuous through that period or if he will work for a while, sell that timber and then come back in a few weeks or so. At this point, things are going well.

He went on to say that we have coordinated with USGS about the downstream monitoring station downstream of the dam site. The timber contractor will clear the area necessary for that. The County has entered the contract with USGS, and that work is scheduled a couple of weeks out. As soon as we get the easements from Peachtree City and from the Candler's we will have the last stream monitoring station installed. We are making progress on the stream monitoring as well. The archaeologists are on site, and are actively working on the recovery site. He, Mr. Conner and Mr. Parrott visited there about a week ago. They are actively finding artifacts at the recovery site. They actually found some the day they were there, while they were there. It seems to be productive and going well.

Mr. Jaeger stated that the work continues with Eco South on the mitigation sites. They are currently working on the Johnson tract down in Meriwether County, and then will be moving to the Busey site next. They are working on floodplain mapping revisions. The reservoir will impact the existing floodplain on Line Creek and Shoal

Creek, and a short distance upstream of the reservoir. This will be submitted to FEMA for a map revision.

Mr. Parrott explained that something has come up on archeological clearance on the wetland site that we did not have to have previously. Each one will have to be reviewed. R. S. Webb, who is doing McIntosh gave us a price for it, which he thought was extremely reasonable. He has already cleared the Johnson tract and sent us a letter on it. That is a lot better than somebody starting from scratch.

Chris Clark asked if the dam height is the maximum it could be for full capacity, or is there potential for additional capacity if we built a higher dam. Mr. Jaeger responded that would require a complete re-permitting of the project. The 404 permit was based on the dam height that is currently planned. The reservoir level, the property acquisition was all based on the current design specs for dam height for the reservoir depth. Starting today, you would be limited by the number of properties that would be impacted around the perimeter. He is not sure we could go any higher without significant cost. Mr. Clark commented that some communities around the State have asked to raise their dams to increase capacity. This has been a hot topic and they have talked about going to the communities that have either applied for their 404 or already have it to make sure they don't have capacity they could have while they are still in the process, instead of having to come back.

Mr. Jaeger commented that if we went back to the very beginning, when the dam and the lake were first conceived, at the concept setting phase, it would have been potentially possible to raise it. We are limited somewhat by the topography of the dam site. It can only go up so high before the abutments would top out.

Mr. Parrott stated that this would have made a difference at Lake Kedron. It could have been thirty feet higher. The original concept would have backed water up over Dogwood Trail.

Commissioner Smith asked where we are on the dam design. Mr. Jaeger stated they are planning on submitting to Safe Dams the first of July. We think we have enough dirt. It is spread around multiple locations and they are looking at an option now for a system called Bentonite slurry cut off wall interior to the dam which would help with seepage control and reduce the need for the select dam material. He thinks that if we can work with that system, we will be able to use all the dirt they have found and not have to just find select materials. They are still actively looking for dirt as well. Mr. Parrott commented this makes a difference in the cost. Mr. Jaeger commented that there is no doubt about that, the nature of this site is that it has already been used as the borrow source for material quite a while back, so what is left is scattered and is some distance from the dam. If we can come up with a plan to require the select clay materials, that will help. Mr. Parrott commented that Bentonite was also used at Lake Horton. Mr. Jaeger said this will increase the cost, but compared to having to go long distances to bring in select material, we have to compare those two things and see where we are, whether it is a benefit cost wise to

go with the Bentonite and if the cost savings is greater than the cost to collect all the soil material from the lake bed. It may be that we need to do it regardless, depending on the amount of soil we can come up with. The requirement for the select materials is that it reduces the permeability of the soils and it reduces the amount of seepage that flows through the dam. All earthen dams have seepage; they have internal drain systems that collect water so they don't become a long term problem. It is planned for and designed into the dam. The Bentonite materials are very low permeability, so that you mix them with the soil and then you create a thin vertical wall through the dam of this material that sort of blocks seepage. It is expensive to install it, to mobilize and de-mobilize the equipment. They are investigating that now, to see if that is a viable plan for the dam construction.

Mr. Parrott explained that we don't have a good firm price at this time. He wants everybody to understand that we are still working and we don't know what it will cost, because we haven't completed the design. Once the design is done, we will know.

III. UPDATE ON THE DROUGHT SITUATION.

Mr. Parrott reported that Lake Kedron is full. Lake Horton is 1.3 feet down. We are still pumping from the Flint River, but it is getting close. City of Fayetteville is using water out of Whitewater Creek because we have had rain and have been able to put their plant back in service. The average day for Fayetteville has been 38,000 for April. They are .6% of our day. They can be as high as 14%. We are still under the 10% winter number. Currently we have Level 4 drought restrictions with the additions that you can water 25 minutes and go online, or go to the extension office and take the quiz and be able to water new landscape for 10 weeks.

Commissioner Smith asked where we are regionally in regards to water. Mr. Clark stated that we are improved. Allatoona and Lanier are still under, but are much better. We are at a 2 inch deficit for the year, but we are still in the hole for the length of the time of drought. He thinks there will be some relief, but he does not see them lifting Level 4 for North Georgia. There are no counties in Georgia in exceptional drought anymore, which in June of last year all the way down to just above Macon were exceptional. Now, it is extreme. Almost all of South Georgia is under no federal drought anymore. It is a much improved situation. The problem is that when the climatologist said that this rain is going to stop by the second week in May and we won't get anymore, if that is the case, then we will be back where we were by August. We are making progress; there are still some concerns for some severe North Georgia counties that are pulling all out of creeks. They are going to be in trouble again. We will probably move to some relaxation, he thinks they are looking at a couple of different options internally about how to incentivize communities instead of penalize communities. Maybe take a different tact on that. He thinks at the next Drought meeting, things will be improved. North Carolina is probably the worst right now. They still have some exceptional drought counties

and are in much worse shape than we are right now. The projections through the end of August show them suffering a lot more than we do.

Mrs. Quick reported that we have given away 325 water saver kits. We ordered 500 to start with, 213 of them have been picked up at the Water System office and 112 have been picked up in Peachtree City. She commented that people have been excited to get them. We have done 53 toilet rebates at a price of \$3,450.00 in credits to customer accounts. The committee discussed the need to order additional water saver kits. It takes about 6 weeks to get an order. We paid about \$3,500.00 for the first order. Mr. Parrott mentioned that we will have to be aggressive in advertising they are available again. There are 13,000 homes built prior to 1993 that possibly would qualify. However, many of them have already remodeled and installed low flow fixtures.

Mr. Clark mentioned that the State is going to launch a huge new conservation campaign that will go on for the next two years for energy and water. They are going to spend a lot of money trying to convince Georgians to be better stewards, whether there is a drought or not. They will keep this issue out in front of people, even if we alleviate the drought levels.

Mr. Conner suggested, in that light, since they will make people even more aware, we should go ahead and get some more. Mr. Parrott stated that we are paying for this out of the charges that are assessed on water used over 20,000 gallons. We are actually using that money where we are trying to adjust people's behavior. It is not directly out of what we are spending for current projects for Operation and Maintenance.

Mr. Clark made a motion to recommend to the Board of Commissioners to purchase 250 water saver kits. Mr. Parrott seconded and there was no opposition.

EPA WATERSENSE PROGRAM

Mr. Parrott explained that the Environmental Protection Agency is sponsoring a WaterSense program. This is a nationwide program and they are actively trying to get Water Systems to participate. The program includes products that you can put your logo on. Mr. Clark commented that the interesting thing is that Senate Bill 342-1226 expands the Energy Star sales tax holiday that we do every year to include WaterSense products. The State has partnered with them.

Mr. Parrott commented that several Water Systems and the Georgia Department of Natural Resources have signed on as well as the Water Wise Council. There is no cost. Being able to customize the flyers and brochures helps bring it to a local level. Mr. Clark commented that the goal is to make this the same as Energy Star. Everybody knows what that is.

 Mr. Clark made a motion to recommend to the Board of Commissioners that the Water System participate in the program and for the chairman to sign the Partnership Agreement. Mr. Conner seconded and there was no opposition.

IV. FLINT RIVER PUMP STATION.

Mr. Parrott explained that starting up both pumps we found out that they both were not pumping what we thought they would. We spent several weeks checking valves, flows and meters, and we do not have a definitive answer as to why we can only get 13 MGD with the two pumps. Both pumps are fairly old and have been rebuilt. The trouble is, the bid we had for the replacement was also for a variable speed pump, which would allow us to pump less than 10 MGD, which means as the river drops down, we could get a much lower flow. We need to award the bid to put a new pump in. He went on to say that we need to do additional engineering to see what we can do to put a bigger pump in to raise the flow above 13 MGD. We still need a pump that can pump less than 10 MGD, but we also need one that will pump more than that. We need three pumps, so that when one goes out, we won't lose as much flow. We only have a short period of time that we can pump from the Flint River. Although the pump bid came in higher than our budget, we have money available in the Renewal & Extension fund, and if the Board approves paying for it out of R&E, then we will have more flexibility and will be able to get more water.

Mr. Jaeger commented that we need to look at capacity requirements for the third pump, based on what we are actually getting from the existing pumps. The plan was to put a third pump in that was identical to the first two, then we could run any two of the three and get your maximum flow. Then the third one would be variable speed which would allow some flexibility. Since the rebuilt pumps are not apparently pumping like we thought they should have been capable of, we need to look at this new pump and decide if we want to increase its capacity. We have a little more design to do to answer that question. The existing pumps are constant speed and the new pump would be variable speed. He went on to say that the original permit for the withdrawal was 10 MGD, so the original operation of that pump station was to run one pump and have a backup, and then alternate the use of the pumps. Since it was pumping basically to a holding lagoon at the water plant or to the Horton Creek Reservoir, there wasn't a real need to have variable control on it. It was either on or off. Because we have more ability now to pull from the river, the withdrawal permit has been increased over the years; it now pays off to have flexibility.

Mr. Parrott explained that he still plans to recommend the third pump, but the bid response we got will be a replacement for one of the two pumps we now have that are old and rebuilt. The next time one of them goes out; do we want to rebuild something that is only running at 85%? He is still going to recommend the pump and the project; however the recommendation may come back with two pumps. The piping that is installed was designed to handle up to 16 MGD. Something has to

be done soon, because it takes 12 to 14 weeks for them to provide a pump and motor.

Mr. Conner asked about the horsepower. Mr. Jaeger said that the current bid is the same pump exactly. If we increase the capacity, it may require larger horsepower. We are close to the threshold of that 400 hp motor. It is possible that we could do some modifications to get more flow with the same horsepower.

V. HIGHWAY 74 PHASE I WATERLINE RELOCATION.

Mr. Parrott reported that the current project on Highway 74, DOT is paying part of it and the Water System is paying part of it. The project has required us to move additional stuff that we did not plan. We went back to the Board to get permission and worked that out. We are down to an additional waterline relocation that DOT wants on Crosstown Road where they will put in a storm drain from 74 down to Flat Creek. We have a waterline in the way. The estimated cost from our contractor is \$62,000.00 to do the work. This was not part of the plans. An additional relocation is because of the ditch line at Avery Dennison, and we are close to being able to do it within the current budget. It is a day to day project. We believe we can do it within the current budget, but it would have been nice to have \$110,000.00 in there for this surprise. We also need to do a tie in at Kelly Drive with the old line and the new line. We have funds available, but the Board has to approve the expenditure out of the Renewal & Extension fund. When the project is finished the DOT will reimburse the Water System for what they said they would reimburse us. We will have \$475,000.00 coming back in. It will cost \$110,000.00 to complete this job.

Mr. Parrott went on to say that the waterline extension engineering is complete for Phase II. It is different because of the waterline easement being outside of the right-of-way of the DOT, they agreed to handle this with the road project. Only about 22% of the cost of this job we will have to pay. Both of these large waterlines were put outside the right-of-way.

VI. DISCUSSION OF WATER TANK SITE ON JENKINS ROAD.

Mr. Jaeger distributed copies of an aerial photograph of the site. It showed the three sites that were evaluated. All three are school board sites. Site #1 is behind Flat Rock Middle School. Sites 2 and 3 are in the existing spray fields which have or will soon be out of service. A new lift station has been put in and the schools are now on the sewer system. He said they evaluated each of the three sites by doing some investigative soil borings. Site #1 is the preferred site; it has much shallower firm foundation materials, which would allow for a shallow spread footing type foundation for the tank. On sites 2 and 3 there was no firm material encountered within 60 feet of boring depth, meaning that construction would require deep pile foundation, which is a doable option, but the shallow foundation is preferred. The geotechnical report is recommending site #1. He has forwarded the report to the

tank manufacturer and they concur with that recommendation. They also feel that the shallow foundation site would be preferred. Rock is closer to the surface; it is close enough in this case that there may have to be some rock excavation to get the foundation depth. The construction of the shallow spread footing would be cheaper, even with the rock excavation than the deep pile foundation would be on sites 2 and 3. He went on to say that the distance between Jenkins Road, which is where the water main is and the tank site is shorter to site #1 than it would be to either 2 or 3. The existing waterline is on the north side of the road. All factors are pointing towards the Flat Rock Middle school site to be the site of choice.

Mr. Jaeger explained that the next step is to get some survey work done to delineate where exactly the tank site would be on the overall property, determine whether or not this is done by way of a permanent easement from the School Board to the Water System, or if it is more of an acquisition, then defining access in and out. The access road is not that big of an issue, but we would need to run a waterline most likely on the western edge of the property just to the west of the running track. He stated that his recommendation to the Water Committee is to proceed with survey work necessary and choose this as our site.

Mr. Conner made a motion to recommend to the Board of Commissioners to choose Site #1 as the water tank site and to proceed with the survey work needed. Chris Clark seconded and there was no opposition.

There being no further business, Chairman Pete Frisina adjourned the meeting at 8:50 A.M.

	Peter A. Frisina
The foregoing minutes were the 28th day of May, 2008.	approved at the regular Water Committee meeting or
Lisa Quick	