

WATER COMMITTEE
JANUARY 9, 2008
MINUTES

MEMBERS PRESENT: Pete Frisina, Chairman
Chris Clark, Vice Chairman
Tony Parrott
Jack Krakeel
James K “Chip” Conner

NON-VOTING MEMBERS: David Jaeger
STAFF PRESENT: Russell Ray
GUEST: Kent Campbell, Eco South

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

I. ELECTION OF CHAIR.

Tony Parrott nominated Pete Frisina as Chair of the Water Committee. Chris Clark seconded and there was no opposition.

II. ELECTION OF VICE CHAIR.

Chip Conner nominated Chris Clark as Vice Chair of the Water Committee. Tony Parrott seconded and there was no opposition.

III. APPROVAL OF 2008 MEETING SCHEDULE.

Vice Chairman Chris Clark made the motion to recommend to the Board of Commissioners to accept the 2008 meeting schedule as presented. Chip Conner seconded and there was no opposition.

IV. APPROVAL OF MINUTES FROM THE MEETING ON DECEMBER 12, 2007.

Chip Conner made the motion and Tony Parrott seconded, to approve the minutes from the meeting on December 12, 2007. There was no opposition.

V. ECO-SOUTH PRESENTATION ON WETLAND RESTORATION.

Kent Campbell with Eco-South introduced himself, they are environmental consultants, and have been working with Fayette County on reservoir projects since 1991. Mr. Parrott explained that Mr. Campbell had offered to come explain their proposal to do the work on the sites, not just plan the sites They now offer the service to plan and develop the sites, and also construct them. Mr. Parrott went on to say that the Water Committee has changed since 1991 and there are now new

members. The Board of Commissioners authorized for them to go forward with planning of the sites. In the past, we bid that separately. Now, there is a different opportunity for us.

Mr. Campbell explained that this opportunity would save time and eventually money. He is not sure if it is the approach that fits this committee structure for a capital improvement of this size, because compared to the Lake Horton project and the environmental mitigation that was done for that, this is substantially higher. The major difference in the two projects is that we now have to provide stream mitigation which is replacing the impacts to the actual stream channels that occur in the Lake McIntosh reservoir along with the wetlands. Previously, in years past on a lot of reservoir projects it was strictly just replacing acre for acre the wetlands. That is pretty straight forward. While it is not simple, it is basically just taking areas that were historically wetlands that have been converted for agricultural use and reverting them back to a natural state.

Mr. Campbell went on to say that stream mitigation adds a whole dimension to environmental mitigation as a whole. It is far more intensive on the ground in terms of the work done. It requires special equipment. It requires people with knowledge and experience in building new stream channels. You are dealing with very dynamic systems. You want to make sure you do it right the first time. You don't want to have to come back during your required monitoring period and continually have to retrofit and fix problems. What they would like, what they are most confident in doing is the design work up front, that they know they will have specs and details that they can either take and work on, on the ground with their in house contractors or they can sit down with pre-qualified contractors on a site by site basis and make sure the work is done right the first time. What you want to try to avoid, and it can not only take time up front in getting a formal bid package out on a per site basis and opening it up for anybody to come in and bid on doing the work, is that you are going to end up with probably a lot of low bids, but are they going to be competent bids? Are they going to be contractors who can, in effect, do the work without having to hold their hands through the whole process? And, in effect, training a bunch of contractors to do this work, which is fine, but that takes an awful lot of time. The assurance that you are getting it done right is going to be jeopardized.

Mr. Campbell went on to say that they had given a proposal to do the actual work plan. That is the first stage of this mitigation compliance. It is presenting plans to the Corp of Engineers and the other agencies, for them to review and say, yes you are now ..., yes we agree with your design, we agree with your details, we want you to go ahead and proceed with the construction. Once that is done, and we hope to have those done in May or June of this year, and possibly during that process, go ahead and get some pre-qualifications from any local contractors, that ya'll feel might work towards the same end of completing the mitigation. Eco-South can then oversee that work on the ground. We can have a full team of folks that can effectively do this. He commented that the other method would be that we just

solely do it ourselves as a turn key. They would eliminate going through the bid process or pre-qualification process and they have five sites that they have to work on. Present to this committee or the Board of Commissioners, however the process is going to work, with actual construction detail costs and contracts. They wanted, in their proposal, initially to do the work plans, to give the option to see what would fit best for the project.

Mr. Parrott commented that he and Mr. Jaeger were involved earlier with the other sites and there is some difficulty in using independent and different contractors on different sites. Doing low bid and pre-qualifying, you wind up with different contractors on different sites and it is like reinventing the wheel every time you go out there. These sites were simpler because they were basically taking pasture and making it a swamp.

Mr. Campbell explained that now we are taking those ditches and converting them into live streams again. They have to meet strict criteria. At the end of the day, the end of the monitoring period, five to seven years out, the agencies that will accept them as viable fully functioning stream and wetland mitigation sites. That is where we don't want to get into a year from now, where we've got work plans approved and we are dealing with a contractor who says he can work at this price per hour with an operator, but we are way behind, because we are having to train that group of people or they are telling us they can do the work. Then we come out there and inspect it and it is not competent work. He strongly urged the committee to try to avoid getting into that position and jeopardizing the project.

Mr. Campbell stated there are five sites. Two sites are in Fayette County, one off of Helmer Road in the north end. The other is near Starr's Mill. The Starr's Mill site doesn't have a lot of stream mitigation on it. It is one small tributary.

Mr. Parrott gave the committee a spread sheet with the information split out according to the permit for stream credits. Mr. Campbell said the Nixon tract is in Spalding County and has the smallest component for stream mitigation. The Starr's Mill tract would be the next smallest, but that particular design is going to be fairly simple and straight forward. The other three sites are pretty intense stream mitigation. Fortunately, the Busey tract is actually just one side of Camp Creek. From a cost standpoint, you do not have to deal with an entire stream channel, just the area next to Camp Creek. The Danielly tract and the Johnson tract both have pretty substantial, priority one, stream restoration. This is where you are actually building new channels. Those are critical and we want to make sure those are done right. The wetland component for all five of these is going to be fairly straight forward. That is another option, if we want to proceed in that direction, separate out some of the services, where they can maybe call in another contractor. He knows that we had two or three contractors working on the Horton Creek job. One of them, Mr. Scarborough, in general has taken off and has really become sort of a specialist in doing that kind of work. There are several other

companies, in and around metro Atlanta, North Georgia and in the South East that specialize in doing mitigation work.

Mr. Campbell stated that part of the mitigation for Lake McIntosh involved buying bank credits. Mitigation banks are a very big deal these days. There is a fair amount of work going on with them. There are contractors out there that actually do the work. A lot of it is not on a competitive bid basis. It is all through the individual banks themselves.

Mr. Parrott commented that as these sites finish up and tie in, they have to be accepted. He asked Mr. Campbell to explain what is required to get them accepted. Mr. Campbell said that the initial approval of the work plan is the Corp of Engineers accepts the plan, and releases you to do the work. Once you have accomplished the individual elements of the work plan per site, then you do a first year monitoring where you not only include your field reports from when you are actually doing the work, you go out and sample the soils, hydrology and vegetation, present all that in a report and submit that to the agency, the Corp of Engineers. That has to be done on an annual basis for five years. The wetlands, in particular, require that we monitor hydrology on a monthly basis, either testing groundwater levels or measuring ground water levels and surface water and doing the annual vegetation monitoring which is just going out and counting trees. You have to make sure those are done and submitted to the Corp at the first of the following year of the monitoring event. Typically, at the end of about the fourth year, they will know whether the site is headed towards being successful or not. If there is a need for any retro fit, they will make a recommendation then. That needs to be coordinated with the agencies also. You make them aware that we have a problem area here, we are going to fix it and here is the plan to fix it. Then the next year, in your monitoring report, you show that it has in fact succeeded. If you have gone through the process and even with retro fits, shown that they are working now, your fifth year, if the monitoring meets the success criteria, then you are basically released from your obligations for doing the environmental mitigations under your 404 permit. There is very little work necessary after that other than if the County owns the site, managing and maintaining them to make sure they stay in a natural condition. There are procedures where you can incorporate passive recreation, mainly just walking trails, if you want to provide as a public opportunity. The main goal is to make sure that, in the five years past construction of each of these sites, that you get a release from the Corp of Engineers that you have met your obligations.

Mr. Parrott stated that is one of the reasons why we fenced all the sites but the Sandy Creek site. We had a deed restriction on fencing up there and that was the one that gave us the most trouble with people on four wheelers and horse back riding and everything else. These plots Kent is talking about are locations that they have picked in 65 acres and they go back each year and pull a string around it for however big an area and count what is out there. If it winds up being one of the areas that they have decided to criss cross with the four wheelers, it just messes up the numbers.

Mr. Campbell agreed that you want to try to control access as much as possible. A lot of times, just signage will work, in most cases, but you can have some properties that have sat fallow for a number of years. People will just decide they can use it for their own purposes. In particular, four wheeling can be very damaging.

Mr. Campbell explained that restoration is actually doing channel work, where you are taking a stream that has either been altered or degraded from land use and you are doing a natural channel design and basically trying to restore it back to a previously altered condition. Similar to wetlands, where you are taking areas that were typically converted for agriculture and you are just making them wet again. With stream restoration, you have different levels of restoration, depending on how altered that site is in particular. Stream enhancement may have some channel work that is necessary just to stabilize stream banks so they don't erode any more. Then planting along those banks and stream restoration also involves stabilization and planting, but you are not doing actual realignment of a channel. Enhancement takes on various forms; it can be as simple as just planting. It can be a combination of maybe some fabric, erosion type fabrics on the banks, and planting. It could be structures in the banks that divert water, divert flow during flooding events in combination with fabrics and planting. Preservation is just setting aside an area in its current condition.

Mr. Campbell explained that riparian enhancement on this site is an existing stream channel that cattle have been grazing in the wooded area. They are proposing an enhancement in the wooded area along that particular creek. It qualifies as stream credits. It is a different form of mitigation. Credits are what are derived out of mitigation banks and are based upon the type of mitigation being done on site. You multiply the factor by your footage. He stated that what we are dealing with now is strictly footage. When he is talking about intensive stream channel restoration on a per foot basis, it can be anywhere from \$125.00 to close to \$200.00 a foot, depending on the design and the intensity of the work that is necessary. Riparian, where you are just planting in the floodplain next to the creek or along the banks, work can be anywhere from \$25.00 to \$45.00 a foot. On the whole, stream mitigation generally runs around \$100.00 to \$120.00 a foot, if you have restoration, riparian combinations. The more intense type of mitigation, and we have maybe a few hundred foot on the Busey tract along Camp Creek that needs some pretty intense bank stabilization, there is some really bad eroding spots. That is real expensive, but they are not proposing to go and do 4,000 feet of intensive bank stabilization. They will do that in places where it is necessary and do less intense work for the remainder of the tract. You may see, if you were to do it on a unit price, to stabilize a large stream bank could cost several hundred dollars per foot. But, over all, the Busey tract will only end up having the cost of under \$100.00 a foot.

Mr. Krakeel clarified the estimated cost of the project is over \$2.3 million. Mr. Campbell stated it is close to \$2.7 million. There is substantial wetland acreage. Again, the site selection process is such that they try to find the most cost effective mitigation sites they can for wetlands and for streams. The sheer amount of acreage

on this project that has to be mitigated is substantial. Mr. Parrott explained that this is just discussion, and when we get the plans ready in May or June and actually have the footage, he will be able to give us a more definitive cost. Mr. Campbell stated that part of their scope is to pinpoint the cost when they have the work plans in place. There will be more discussions in the future on this subject.

Mr. Campbell stated that there is a real advantage to having continuity. They have developed the mitigation plan, they are working on the work plans, and they want to be there to make sure it is done right. They are not trying to corner the market, by any means; they don't want to discourage use of any contractors who provide this service, that want to be involved. We need to go through some sort of qualification process if that is going to be the route we go.

Mr. Krakeel stated that he thinks that is a fundamental issue for the Board to consider, whether we pursue a turn key project versus a competitive bid approach to these various sites given the fact that we have a contractor in this county that has become somewhat of a specialist.

Mr. Jaeger asked that in the event that the county chose to go with the bid route, does he envision bidding them all as one contract or bidding them individually? Or, could they be under construction simultaneously or sequentially, has there been any thought about that. Mr. Campbell said no, not on their end, they have discussed it to a point, but it is an unknown what the Board of Commissioners pleasure will be. He believes Lake Horton was done individually, site by site. It took almost two years, maybe more to get the three big sites completed. If you go that route, because of the stream component, you may be looking at something that could be drawn out several years going individually on a competitive bid process. There would be certain advantages to giving one firm or a team all five sites under one contract. They can then mobilize as needed under their supervision and quality control, making sure that they don't just exit a site without completing certain tasks per the sequence.

Mr. Jaeger commented that potentially, short of unseen savings that would go with having a turn key operation, is the oversight cost. Even if you have a qualified contractor, contractors vary in their efficiency in the field. So, you must have supervision, you must have quality control and the cost of that is something that is not normally seen. If they are not spending time overseeing the contractor who is inefficient and they are doing it turn key, their supervision cost is going to be lower than it would be in a bid situation. It may be hard to quantify that up front. That would be a discussion point with the Board if it were to come to that. He knows that is true from other dam construction projects where you have required supervision by Safe Dams Program and if you have a contractor who knows what he is doing, and he is efficient, you spend a lot less time supervising, just because the duration of the project is shorter, there is less start and stop. There is less redo or problems that have to be resolved in the field. It is much smoother. It is an issue that is sometimes unseen.

Mr. Campbell stated there are some specific mile stones with the permit conditions. Some of it is pre dam construction monitoring that needs to be done. Cost wise it is not anything compared to doing the actual mitigation work. Mr. Campbell went on to say that a credit is a value derived from either per acre or per foot mitigation multiplied by a factor that comes out of the Corp of Engineers standard operating procedure for mitigation. One foot of stream can either have a factor of one or a factor of as high as fourteen, depending on the intensity of the restoration and the width of the buffer that you are proposing on that stream channel. If you propose a four hundred foot buffer on either side of a channel and you are doing a priority one restoration, where you are building a geomorphologically correct channel that is going to be stable, that is going to provide good quality habitat, what the agencies call fully functional. Under a banking scenario, you can get as much as fourteen credits per foot, so if you have a ten thousand linear foot stream, you could be looking at 140,000 credits out of that one stretch of stream. That is what is pushing commercial banks in North Georgia in particular. Acres of wetlands are converted by the same procedure, but the credits are about seven on an acre of wetlands.

Mr. Krakeel asked, based on his knowledge, what does the average credit sell for in a mitigation bank? Mr. Campbell said that it varies from basin to basin. The Flint River, a wetland credit is probably \$5,000.00 to \$6,000.00 per credit. Stream credits are anywhere from \$60.00 to \$80.00 per credit. To throw a conservative number out there, he said that Lake McIntosh would have required around 800 wetland credits total, and probably 300,000 stream credits, if not more. That is a substantial number when you multiply the fair market value of a credit. There are 400 acres of wetlands on Lake McIntosh.

Mr. Campbell asked about the time line on the dam construction. Mr. Jaeger stated they are currently working on the design and hoping to submit it to the Safe Dams program late spring or early summer. In the past, their review process has been about twelve months. He has been told that it has been expedited; drinking water supply reservoirs are a priority. He has asked the question of Safe Dams, is that true, how short is the review period and they won't give him an answer. He is hoping that it will be less than twelve months that is what it took for Lake Horton. We are planning to do the timbering of the marketable timber soon. We are waiting for the Corp to release the credits from Magnolia Swamp, but assuming that goes smoothly we will have timbering under way shortly, but the actual construction of the dam will be spring or summer.

Mr. Campbell said he asked because there are some conditions in the permit for some in stream monitoring. Mr. Jaeger stated that we have one station in place already, and we are negotiating easements for another one, so we have that started.

Mr. Campbell commented that they have fought tooth and nail with the agencies to make sure that drinking water reservoirs don't have to follow the credit regime that a developer has to follow. In their opinion, you are dealing with two different

entities, and although they are pushing for reservoirs now to start to adhering to the SOP.

Mr. Krakeel commented that he thinks we are the first governmental agency that the multiplier for credits was substantially higher than anyone else had ever had to undertake. Mr. Jaeger said that what he remembers hearing was that the Corp asked for something ridiculous on a project that was approved just before us and they agreed to it, which set a higher standard for us. We have to comply with that standard.

Mr. Campbell said that the Tussahaw Creek project in Henry County set a Corp precedent for the minimal amount of mitigation you have to provide for a reservoir. Fortunately, it is still less than what would be required if you have to go through the SOP regime, and hopefully they will not require it, but they are hinting that they will, for future projects, which could make mitigation costs soar on a reservoir.

VI. LAKE MCINTOSH UPDATE.

David Jaeger updated the committee on this item. We are in a holding pattern right now, waiting for release of the wetland mitigation credits from the Corp of Engineers from the mitigation bank. He received an email correspondence Monday of this week from Tommy Craig's office, the attorney who helped get the permit from the Corp, and they were proposing scheduling a meeting this week with the Corp to facilitate release of the credits. As of 8:00 this morning he has not received an additional email stating that the meeting had taken place. If they meet with them this week, we hope to get release of those credits in short order. Then, proceed directly with getting the timbering contract under way. As he said at the last meeting, our timbering contractor is very anxious. He calls about once a week. He wants to get going. As soon as we receive those credits, that will begin. We also received written notification that the previous credits that had been conveyed to the County had already been released, which was 1888 wetland credits and 2500 stream bank credits. That still leaves us short of the numbers we need to begin the timbering. With any success, on the meeting we are hoping for this week that will put us over that limit. Then we can begin timbering.

Mr. Jaeger went on to say that we also have some monitoring station work that has been under way with USGS. The Shoal Creek station is installed and operational upstream of the reservoir site. It is on the bridge at Highway 54 where it crosses Shoal Creek. We are working with USGS for a similar station on Line Creek upstream of the reservoir. We have done some survey work in association with that to create easements on each side of the creek that will allow for this monitoring station that was installed by USGS. It was not possible to install that one on the bridge because of the low head dam and the pump station the City of Newnan has on Line Creek. He and Tony will be having additional meetings with USGS. The initial survey work is complete to identify the location of the site and map point the plats marked to create the easements for this monitoring station. Mr. Parrott stated

that one is a private property owner and the other is the Southern Conservation Trust.

Mr. Krakeel asked when did he anticipate having the plans ready to begin the discussions with Southern Conservation Trust and the private property owner. Mr. Jaeger replied that he has the survey done now. The next step is either meet with USGS again to have them pencil in exactly what they want and what type of access they will require. He has had conversations with the Candler family on the Coweta County side. They met him the day the survey crew came out. They are in the loop. As soon as we can identify with USGS the specifics of what they want on the area that we have surveyed, then we can meet with them immediately.

Mr. Krakeel asked if primary access will be through the Southern Conservation Trust property or through the Candler property. Mr. Jaeger responded Southern Conservation Trust. The way he understands this monitoring system working would be on the Fayette County side will be a small slab with an enclosure on it and the equipment for the monitoring station. All that is accessible through the Southern Conservation Trust park land. On the other side is basically an area to anchor a cable that runs across the creek. Access to the other side will be limited, if at all. It may be accessible just by crossing the creek at that point. Those are the kind of details to work out with the USGS.

Mr. Parrott mentioned that with the disturbance that they have to do in order to put their two inch pipe in down to the creek, they hand dig it. They don't even do it with equipment. They only trim what little trees they have to and they have talked with David Rast in Peachtree City. We have all that covered. We need to have something formal to take care of this. Because of dealing with USGS, Peachtree City and Southern Conservation Trust and the property owners, it does not go as smooth as the other one did since all they needed to do was go to DOT.

Mr. Jaeger went on to say that the archaeological recovery plan is still under review by the State Historic Preservation Office. Once they approved that plan, then the archaeologist will be back out doing recovery on that particular site. We cannot timber that area until that is complete. He does not anticipate that will be an issue as far as scheduling and coordinating the timbering. He could be out there as soon as February. We are also, essentially complete with the spillway hydraulics for the dam itself and he is currently working with the geotechnical consultants on settlement investigation and issues with the spillway which will determine their recommendations for the design of the dam embankment and the undercutting of materials beneath the spillway.

Mr. Jaeger went on to say that they have done investigation in the dam footprint area. They still have to analyze the borrow sources to determine the materials that will be collected to build the dam, and they can't evaluate those until they actually collect them and then re-compact them. We are waiting for the timbering to start so the geotechnical guys can follow behind the timber contractor and not have to spend

a long time clearing. So far, the soil sample investigation has gone well. Mr. Parrott commented that when we built Lake Kedron they found weathered fractured rock, and once they started excavating; it threw off the project a little. When we began building Lake Horton, we found springs. He is expecting a surprise from Lake McIntosh as well. Mr. Jaeger commented that there is some potential for rock in the embankment and abutment areas of the dam. They are trying to get the spillway designed so that it will minimize the issue of differential cells, where part of it will be on rock and part of it will be on compressible materials for long.

Mr. Krakeel asked if the survey work around the lake has been completed all the way around the lake. Mr. Jaeger stated that the staking work of the clearing limits is done. They have flagged the 780 contour completely around the lake. They have also flagged an area around the dam location itself. That being the timbering limits, and that is complete. The approval of the release of the credits by the Corp will be the first domino (in effect). At that point, we would issue a notice of award, send the contracts and there is probably a couple of week's paperwork before issuing notice to proceed.

Mr. Krakeel asked if there are any permitting requirements associated with Coweta County. Mr. Parrott stated that we applied for a variance for the stream buffers. Mr. Jaeger went on to say that we have a stream buffer variance that has been submitted to the State to allow us to work within the 25 foot buffers along State waters. In doing so, Coweta County had to issue a letter recognizing the project and that the stream buffers were necessary, as did Fayette County. To his knowledge no additional permit is required. The timbering itself, because it is strictly timbering and not clearing, does not require a land disturbance permit.

Mr. Krakeel asked if we will be required to have a land disturbance permit from Coweta County once we start the process of actually grubbing the site. Mr. Jaeger replied that in the past, the County has not gotten permits from anybody else. There has been a courtesy notification of projects that are within other jurisdictions, but as long as the County has owned property they have never requested permits from other jurisdictions. Mr. Parrott commented that as part of that variance, the legal notice was posted in the paper, and there is a thirty day comment period for the variance request.

VII. UPDATE ON DROUGHT SITUATION.

Mr. Parrott explained that we received a request from the Department of Natural Resources to explain why we did not make the drought goal of 10% reduction. He forwarded them additional information to show that we did. The figures that were in the paper did not include our production; they did not use the South Fayette Water Plant. Then they sent us something that we did not make it. Because we have two operating wells and two plants, that is the total water production, then we sold the City of Fayetteville over 900,000 gallons per day, which is deducted off. Carrying it out to three decimal places, we are ok. Mr. Parrott

distributed a production report with December information for the group to view. The first six days of January, however, are not good, but it is hard to judge six days. From the 20th of December through the 4th of January we had six main breaks. One in Peachtree City shut down 1/3 of the City. When problems like this occur, there is a form that we can submit to the State, but Mr. Parrott said he does not know how they review the information.

Mr. Parrott reported that we have continued to notify people with irrigation meters, and for the most part they have been more than willing to terminate since they don't want to be paying a minimum bill for a service they cannot use. He did have one developer that used a lot of water last month and submitted that he was still entitled to thirty days for this month because of new planting. We have it flagged and will cut him off later on this month. We have a majority of these off, the number is way down. The water conservation rate that we implemented on customers using over 20,000 gallons has dropped down to less than \$5,000.00. This number has decreased since we have tightened up on the water restrictions. At Mr. Krakeel's meeting the other day, Chief Marshal Collins pointed out that they have not had a complaint in ten days.

Mr. Krakeel asked if Mr. Parrott had responded to the person on the fire hydrant issue. Mr. Parrott stated that he would like to discuss that today. In flushing fire hydrants, the Water System does it because you have an increase in trihalomethanes in waterlines because you chlorinate it and you have organics in the water. The water we provide is not 100 percent pure. There are still particles in the water. The State requirements for trihalomethanes used to be four sites average. We were making that on the standard. Now, the standard is going to be four sites, each location individually, pass or fail. Water that stays in a waterline for an extended period of time reads higher. So, we flush the water to give better quality. Then we also do it because of main breaks and everything else, where we reduce the pressure on the line and we get the water discolored. Basically, if we do not do our flushing program like we have always done our flushing program, we are not going to pass some of these other requirements that DNR has submitted.

Vice Chairman Clark asked when the new rules will go into effect. Mr. Ray commented that we are already sampling for the new locations in the system for the THM's and HAA's (haloacetic acid). We will start having to average those quarterly. The rules were promulgated through the EPA, and EPD carries it through as a primacy state. A year ago, we had meetings; we submitted to EPA and EPD the sites throughout the county in the system that we are going to monitor. The sampling started last quarter. This is all part of the updated Drinking Water Act, and rules have been promulgated during the last ten years. This is the second phase, focusing now on specific sites in the system versus an average of four sites together.

Mr. Parrott stated that the drought actually has made the water age time in the pipe even longer than it was in the past. There is almost no flow, where we would be

running an average of almost 10 MGD, we are not now. Some areas, for example, Shenandoah Estates in the very north end of the county, these are one acre lots and there are not near as many sprinkler systems in that subdivision. They are not watering and there is not that much flow in that area.

Mr. Krakeel commented that he does not know how you could capture the water once it is released from the hydrant. Mr. Parrott stated that our total non revenue water last year was 4.5%. The American Water Works Association standard looks at 10 and 12% loss per year. Mr. Krakeel commented that the perception that we are in a drought, we are under all these conservation measures and we are flushing water down the street out of fire hydrants where people see a six inch outlet on the side of a fire hydrant shooting a gusher of water out of it.

Mr. Krakeel suggested putting a section on the County web site that deals with the issue of system maintenance and requirements to provide people some education about the need for flushing hydrants. This would begin an educational process for the general public. The committee discussed this issue at length.

State Changes to Drought Restrictions

Mr. Conner asked about the action taken yesterday by the Water Council. Vice Chairman Clark commented that the new State plan will impact the metro Atlanta region, which we are a part of. The metro region will have to conform and do the same type of work that the rest of the state will do, but the metro region is pretty much ahead and in most cases will have stronger standards than what they passed yesterday. It won't be a huge impact for the next couple of years for the metro region. Most of the work the rest of the state will be doing, we have already done here. It is really, getting the rest of the state to catch up.

Mr. Parrott said that the metro district is doing their five year review and in this five year review, we will add any additional changes.

Vice Chairman Clark said that there will be a time that we will finish in 2008, but he thinks there will be a temporary acceptance of that so if we have to have any change in 2009 when the other plans start to go in, we can do it.

Mr. Krakeel asked if it is the intent of the state to continue this compliance requirement as we start approaching the spring months and the summer months at the levels that we are currently looking at. Vice Chairman Clark said that the climatologists are now telling us that the drought has now expanded into and has increased in South Georgia. Whereas, right now, North Georgia is Level IV, Central and South Georgia are Level II; he imagines that Middle Georgia will be put on a Level III by the end of January or mid February. Clearly, Atlanta will stay in Level IV, unless there is a big change in March, he thinks we will see these standards continue on into next year. Climatologists are telling us no significant rain until April, but he has a hard time projecting beyond that.

There being no further business, Chairman Pete Frisina adjourned the meeting at 9:20 A.M.

Peter A. Frisina

The foregoing minutes were approved at the regular Water Committee meeting on the 13th day of February, 2008.

Lisa Quick