WATER COMMITTEE SEPTEMBER 10, 2003 MINUTES

MEMBERS PRESENT: Chuck Watkins, Chairman

Dr. George Patton, Vice Chairman

Chris Cofty Tony Parrott Chris Venice Bill McNelly

NON-VOTING MEMBERS: Bill McNally

ABSENT: Jim Mallett

STAFF PRESENT: Russell Ray

David Jaegar

GUESTS: John Munford, The Citizen

The meeting was called to order by Chairman Chuck Watkins at 8:00 A.M.

I. APPROVAL OF MINUTES FROM THE MEETING ON AUGUST 27, 2003.

Vice Chairman Dr. George Patton made the motion and Tony Parrott seconded to approve the minutes from the meeting on August 27, 2003. There was no opposition.

II. DISCUSSION OF ARNOLD HICKS PROPERTY AT LAKE HORTON.

David Jaegar presented a report on the groundwater measurement at the Hicks residence. They checked the monitoring wells again. There were six wells installed in 1998 and they are still there. They were checked on September 4 and again September 9. He summarized by saying the water levels in these wells is relatively high, compared to all the other times that he checked them. With the exception of the beginning of this period, which was the same time when the Hicks were experiencing these problems around their yard. The lake level is within six inches or so, of being full right now. Again, when we compare it with other times when the lake is full, there are fluctuations in the monitoring well levels. He thinks it supports the report that Piedmont Geotechnical did saying the level on these wells is more related to rainfall events than it is to the lake event.

Mr. Jaegar referred to the chart and discussed the groundwater elevation. When measured on September 4, elevation was 783.29. They measured it again on the 9th. It had dropped to 782.39. That is essentially eleven inches, or so, of drop. Over that same period the lake level probably changed very marginally. If these levels were truly tied to the lake, you would see minimal change in the groundwater unless the lake level was moving. He thinks Mr. Meyers, in his report, as was discussed last meeting, concluded that it appears the groundwater problems are more of a rainfall event than they are a lake level event. He thinks this supports it because we have had relatively dry periods between 1998 and this year. This year is a wet year and they are having problems again. He went on to say that his inspector told him that the ground around the monitoring wells is firm and relatively dry right now. We have not had much rain in the last few weeks. As you get very close to

the lake it gets softer and there are some areas where there is some water standing. What he has been told is the ground is relatively firm and dry. He thinks, over time, as we have had less rain, the problem has subsided. It has had a chance to dry out.

Discussion followed pertaining to installing a french drain. Mr. Jaegar stated he thinks it has a possibility. If their ground water elevation is high enough, you will still have problems with having anywhere for the water to go. He supposed if it day lighted before it got to the lake it could help. The ground elevation is actually a little higher at each of the wells than he had assumed from looking at the pictures at the last meeting. There is a little more opportunity for gravity flow. It would have to be shallow.

Chairman Watkins asked about when we purchased the property reference the pool area. Did we compensate for the pool area? Is this flood plain area?

Attorney McNally replied that we bought the flood easement with the idea this property could flood at any time. Any improvements they put in, they are putting in at their risk. We can't control what would happen. He stated that he thinks they felt as though they could leave the pool. The hundred year flood elevation is something that we predicated the fact that it was a hundred year storm. We paid them fifty percent the total value of the value of the land.

Mr. Jaegar clarified that Mrs. Hicks made a comment that the flood plain goes through (or across) the pool. He is not sure that is really clear about what takes place. His recollection is the pool deck is at or very near the basement elevation of that house. Based on the minutes of the previous meeting, she says the basement elevation was 284.9, which is actually incorrect. It is really 784.9. The hundred year flood elevation is 784. That was the easement between elevation 780 and 784. He thinks the pool deck is somewhere very close to the basement elevation, which would be roughly 6 inches to 12 inches above this hundred year flood plain. The line of this flood plain would run to the pool deck, then run around the pool deck and then continue across. He thinks the pool deck is actually 6 inches or so above the flood easement. Mrs. Hicks probably looked at a drawing that had a line that ran along the 784 contour and maybe it ran across her pool. He added, that he does not believe, from what he remembers, that the pool was actually below that flood elevation. The deck is slightly above that. If they encroach into it, elevation wise it is higher than the flood elevation, slightly.

Chairman Watkins asked if this is the same home that came to us several years ago with problems in their basement? Mr. Parrott replied yes. Chairman Watkins added obviously they corrected that by drainage around the foundation.

Mr. Parrott stated this does not appear to be something the Water System is responsible for. It would be up to the Hick's if they want to do remedial work. They would need to use good judgement, not fill in the flood plain that will create a bigger problem. It appears to

be the Hick's responsibility.

Chairman Watkins questioned whether we have monitoring wells at other properties. Mr. Jaegar stated these were installed specifically for this problem. When it first came up, we had the geo-technical firm install them to monitor over that period.

Chairman Watkins suggested writing a letter to the Hicks stating we revisited this, looked at the monitoring wells and we feel their problem is not caused by the lake elevation. Make some suggestion as to what they should do. If they do something in our buffer, they need to ok it with us.

Mr. Jaegar stated he could summarize the findings in a letter for the Water System. The letter could then be forwarded to the Hicks, or he could send the correspondence directly to the Hicks.

III. PRESSURE PROBLEM/SOLUTIONS ON HIGHWAY 74 NORTH.

Mr. Parrott stated the Water System keeps growing, Tyrone keeps growing. Going up Highway 74 North out of Tyrone past Jenkins Road, Sandy Creek, Peggy Lane going to the county line is some of the highest elevation in the system. Our pressure operates off the tank pressure. The tank pressure at the Crabapple tank decreases going up this way. Years ago, we installed a pump station to pump City of Atlanta water into the Crabapple tank before we ever expanded the system. He went on to say that he is interested in Mr. Jaegar working on a plan that we could use the pump station to pump water north in the network we have to take care of the fire flows and pressure.

Mr. Parrott stated a new subdivision is planned, and a large school complex has been built on Kirkley Road. The entire area is going to continue to grow. Most of the piping is there because we have two waterlines. There is a 12 inch and a 20 inch that run through the road. We have the pump station and the electricity. Costwise, it is not a big project. Sustaining pressure may be a problem. There is the potential for low flows for the fire hydrant flows that we are trying to maintain at 1000 gpm. There are also plans for a future subdivision on Thompson Road. Two asphalt plants are on Peggy Lane.

Mr. Jaegar stated this is workable. It will take some modification of the pump station. A storage tank will not be needed. A pressure tank may be needed if we are going to use this pump station to maintain pressure. A pressure tank would hold the pressure while the pumps are off. The tank would be only a few thousand gallons. It provides a buffer so you have a pressurized reservoir to serve the system while the pumps are off. The pumps are not running or cycling constantly. It would not be elevated.

Vice Chairman Dr. George Patton made a motion to recommend to the Board of Commissioners to authorize Mallett & Associates to do an engineering study of the water lines on Highway 74 North. Mr. Parrott seconded and there was no opposition.

IV. RECOMMENDATION OF FLOW AND PRESSURE IMPROVEMENT TO THE SYSTEM.

Mr. Parrott explained we have two locations on the north end, Banks Road and Ellis Road that we purchased water from the City of Fayetteville years ago. With the pipe network we have now, we can tie these two locations into the loop line and do away with these two connections to the City. To his knowledge we have not taken water off these two meters in ten years. Instead of having a dead end on an 8 inch line we have looped our existing system into the loop system which again, adds to better water quality and better fire flows for the area. These connections were established through the Board with the City of Fayetteville years ago. We will be doing away with two connections that tie into our system. We purchased a total of $1 \frac{1}{2}$ million gallons last year and this was entirely for Drennan Lake subdivision. Out of over 3 billion gallons of water produced this is how much the City purchase was.

Mr. Parrott continued by saying both projects can be handled by Shockley Plumbing under their annual contract. It is not a very big project. The work will only take a couple of days at each location.

Tony Parrott made a motion to recommend to the Board of Commissioners to authorize Shockley Plumbing Company to tie in two locations, Banks Road and Ellis Road, into the Water System. Chris Venice seconded and there was no opposition.

V. LAKE MCINTOSH UPDATE.

No report at this time.

There being no	further	business,	Chairman	Chuck	Watkins	adjourned	the meeting	at 8:25
A.M.								

	Chuck Watkins
The foregoing minutes were apday of September, 2003.	proved at the regular Water Committee meeting on the 24th
Lisa Gillis	