

MINUTES
CHATHAM COUNTY BOARD OF COMMISSIONERS
SPECIAL MEETING
JANUARY 29, 2007

The Board of Commissioners (“the Board”) of the County of Chatham, North Carolina, met in the Superior Courtroom, 1 Hillsboro Street, located in Pittsboro, North Carolina, at 6:00 PM on January 29, 2007.

Present: Chairman Carl Thompson; Vice Chair, George Lucier; Commissioners Patrick Barnes, Mike Cross, and Tom Vanderbeck; County Manager, Charlie Horne; Interim County Attorney, Jep Rose; Finance Officer, Vicki McConnell; and Clerk to the Board, Sandra B. Sublett

The County Manager welcomed everyone in attendance. He explained the specifics of the water program and introduced Fred Hobbs to make the presentation.

WATER SYSTEM UPDATE

Fred Hobbs, Hobbs, Upchurch & Associates President, updated the Board of Commissioners and citizens in attendance on the Chatham County Water System Projects. He reviewed projects under construction, upcoming construction projects, Western Transmission Mains, summary of project costs, water system growth (past six years), projection of water system customer growth (ten years), water usage projections (ten years), long-term water supply options, and total cost of the Harnett County proposal.

A copy of the presentation is as follows:

Chatham County Water System Projects Updates

Projects Under Construction:

- **Group “B” – Pea Ridge Road Transmission Main:**
 - Project Estimate - **\$8,764,000*** Including Change Orders #1 and #2
 - Project Status – Construction is complete and water lines are in service (Final Project Cost: \$8,034,220)
- **North Chatham Hydraulic Improvements**
 - Total Project Costs: **\$3,000,000**
 - Contract 1: Tanks & BPS \$1,816,874
 - Project Status – Tank is complete and ready for disinfection
 - Booster Pump Station ready for startup testing
 - Contract 2 & 3: Water mains & control valve \$242,087 (completed) (Estimated Final Project Cost: \$2,290,500)
- **Silk Hope School Water Main Extension**
 - **Water Main Construction Costs \$1.3 Million**
 - Project Status – All pipe has been installed and has begun the testing and punch list phase.

- **Bridge Attachment Estimated Costs - \$200,000**
 - Project Status – Awaiting final approval from NCDOT for the Bridge Attachment Design.
- **Contingencies, Engineering, Inspection, Technical Services - \$200,000**

*** Above cost represent budgeted numbers

TOTAL PROJECT COSTS (Budgeted) - \$1.7 Million

Upcoming Construction Projects:

- **Southern Supreme Water Main Extension**
 - Construction Bid: **\$310,596**
 - Project Status – Construction is complete and water line is in service
 - **TOTAL PROJECT BUDGET - \$420,000**
(Estimated Final Project Cost: \$355,596)
- **Group “B” High Service Pump Station Upgrade**
 - Estimated Project Budget - \$1.0 Million
 - Upgrade enabled the Jordan Lake WTP to pump along the Pea Ridge Road Water Main to the 3M tank
 - Project Status – Harnett County Interconnection put this project on hold
- **Western Transmission Mains**
 - **Contract 1** – From Highway #87 to Chatham Church Road, Pete Roberson Road, Pittsboro-Goldston Road then Highway #902 to Old Highway #421
 - Estimated Construction Costs - \$5.3 Million
 - **Contract 2** – From Pete Roberson Rd along Pittsboro-Goldston Road to Mays Chapel Road and from Highway #902 along Alex Cockman Road and US Highway #64 to Siler City
 - Estimated Construction Costs - \$3.7 Million
 - **Contract 3** – 0.75 MG Elevated Tank (Alex Cockman Road)
 - Estimated Construction Costs - \$1.0 Million
 - **Contract 4** – Highway #902 Booster Pump Station.
 - Estimated Construction Costs - \$1.0 Million
 - **Contingencies, Engineering, Inspection Land Acquisition, Technical Services, Environmental and Administrative:**
 - Estimated Costs - \$2.0 Million

TOTAL PROJECT COSTS (budgeted) - \$13,000,000

(Bids for Contracts 1 & 2 were opened January 9, 2007)

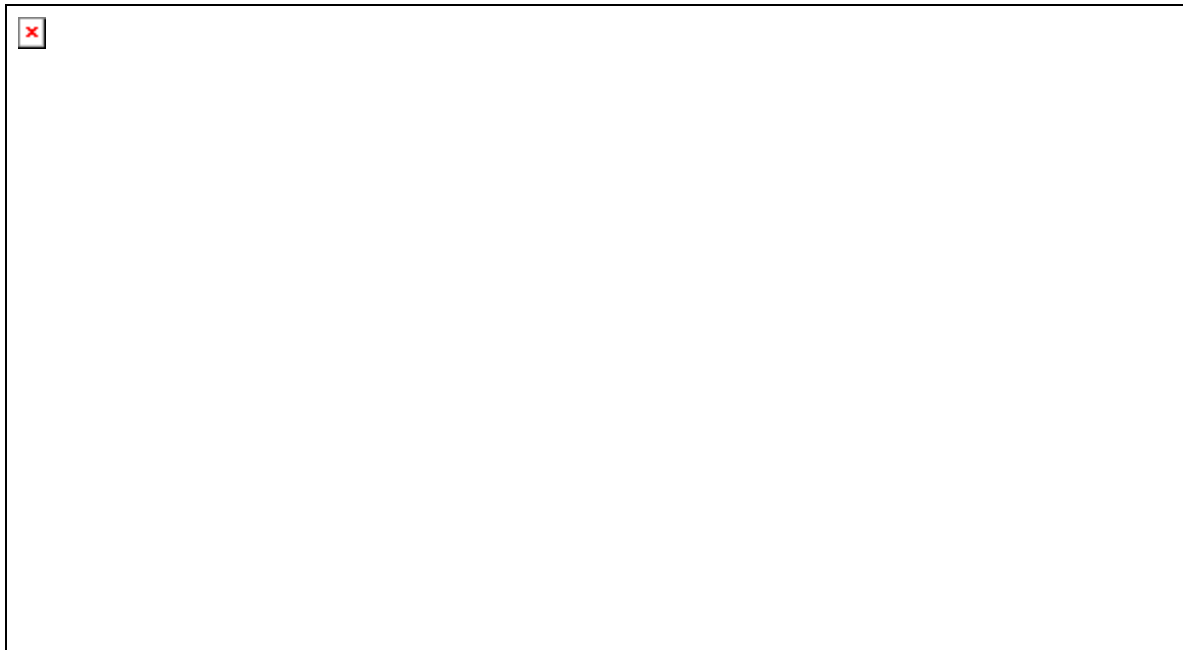
Summary of Project Costs:

- **Projects Under Construction**
 - **Group “B” – Pea Ridge Road Transmission Main \$ 8,764,000**
 - **North Chatham Hydraulic Improvements \$ 3,000,000**
 - **Silk Hope School Water Main Extension \$ 1,700,000**
- **Upcoming Construction Projects**
 - **Southern Supreme Water Main Extension \$ 420,000**
 - **Group “B” High Service Pump Station Upgrade \$ 1,000,000**
 - **Western Transmission Mains \$13,000,000**

TOTAL BUDGETED PROJECT COSTS \$27,884,000



- **Average Customer Growth from FY 00-01 through FY 04-05: 270 Customers**
- In FY 05-06 Chatham County relinquished approximately 200 customers to Siler City. These customers were located on the periphery of the Siler City Water System and had become burdensome for the County to service. As part of this transfer of customer Siler City also agreed to assume the ownership and operation of the Stockyard Road Sewer System. Therefore the FY 05-06 customer growth was not included in the calculation of customer growth rates for the Chatham County Water System. However thus far in FY 05-06, the North Chatham and Southeast Chatham Water Systems have an additional 185 customers from the previous year.





Long-Term Water Supply Options:

- **Existing Water Supplies**
 - **Jordan Lake Water Treatment Plant – 3.00 MGD Capacity**
 - **City of Sanford supply to SE Chatham and Asbury – 0.50 MGD Capacity**
 - **Siler City (SW Chatham) – 0.30 MGD Capacity**
- **Current Water System Demands**
 - **Average Daily Demand (365 day average) 0.903 MGD**
 - **Peak Demand (2 times average) 1.80 MGD**
 - **Required Water Production Capacity (400 gpd/cust) 2.05 MGD**
- **Projected 10 Year Water System Demands**
 - **Average Daily Demand (365 day average) 2.24 MGD**
 - **Peak Demand (2 times average) 4.49 MGD**
 - **Required Water Production Capacity (400 gpd/cust) 5.10 MGD**
- **Option #1 Participate in Harnett County Infrastructure & Defer Jordan Lake WTP Plant Expansion**
 - **Capacity from Harnett County – 6.00 MGD**
 - **Capacity at the Existing Jordan Lake WTP – 3.00 MGD**
 - **Total Combined Capacity – 9.00 MGD**
- **Key Points with Option #1**
 - **In light of the 10 year projections shown for production this option will carry the County well past the 10 year projection of 5.1 MGD.**
 - **Utilizing Option #1 will commit a capacity of 6.0 MGD in the Harnett County Water System.**
 - **There will be a minimum usage of 1.0 MGD once the necessary infrastructure in place to transfer this water.**
 - **Allows the County to maintain the utilization of the Jordan Lake Allocation (6.0 MGD).**
 - **Allows the County to defer the Cost of upgrading the Jordan Lake Plant (\$9.0**

- million).
- Provides a potential of 12.0 MGD at such time that Chatham County upgrades the Jordan Lake Plant.
 - Provides available water capacity for Chatham County to the 20 year water use!
- **Option #2 Participate in Harnett County Infrastructure / Expand the Jordan Lake WTP Plant Expansion to 6.0 MGD**
 - Capacity from Harnett County – 6.00 MGD
 - Capacity at the Existing Jordan Lake WTP – 6.00 MGD
 - Total Combined Capacity – 12.00 MGD
 - **Key Points with Option #2**
 - As shown in the 10 year projections shown for production this option will carry the County well past the 10 year projection of 5.1 MGD.
 - Utilizing Option #2 will commit a capacity of 6.0 MGD in the Harnett County Water System.
 - With Option #2 the resultant production capacity will far exceed the 10 year projection, based on the requests for water from the Harnett County Water System it is important to secure the allocation of capacity in Harnett County. However, it is not necessary to expand the Jordan Lake WTP at this time to satisfy the 10 year demand projections.
 - Allows the County to maintain the utilization of the Jordan Lake Allocation (6.0 MGD).
 - Provides a potential of 12.0 MGD
 - Provides available water capacity for Chatham County for the 20 year water use!
 - Will cause operational problems in the short-term due to lack of water demand.
 - **Option #3 Expand the Jordan Lake WTP Plant Expansion to 6.0 MGD with NO Participation in Harnett County**
 - Capacity from Harnett County – 0.00 MGD
 - Capacity at the Existing Jordan Lake WTP – 6.00 MGD
 - Total Combined Capacity – 6.00 MGD
 - **Key Points with Option #3**
 - As shown in the 10 year projections for water production this option will carry the County past the 10 year projection of 5.1 MGD.
 - Utilizing Option #3 there will be no guaranteed capacity in the Harnett County Water System.
 - Selection of Option #3 would assume the following:
 - The planning period for long term water supply is approximately 10 years!
 - Confidence that the County can obtain additional allocation from Jordan Lake!
 - Allows the County to maintain the utilization of the Jordan Lake Allocation (6.0 MGD).
 - Does NOT provide available water capacity for Chatham County to the 20 year projection!
 - **NEXT STEP-**
 - **SELECTION OF LONG-TERM WATER SUPPLY OPTION**
 - **PROCEED WITH THE PLANNING STAGE OF THE SELECTED OPTION.**
 - **Option #1 –**
 - Jordan Lake WTP Design and Environmental is in progress, permit the project

and complete the Environmental Assessment and put these documents on the shelf until such time they are needed.

- **Begin the Environmental Assessment and Design of the Connection to Harnett County.**
- **Execute Water Purchase / Facilities Contract with Harnett County.**

- **Option #2 –**
- **Jordan Lake WTP Design and Environmental is in progress, permit the project and complete the Environmental Assessment and proceed with construction.**
- **Begin the Environmental Assessment and Design of the Connection to Harnett County.**
- **Execute Water Purchase / Facilities Contract with Harnett County.**

- **Option #3 –**
- **Jordan Lake WTP Design and Environmental is in progress, permit the project and complete the Environmental Assessment and proceed with construction.**
- **End discussions with Harnett County.**

End of presentation.

Larry Ballas, 139 Indian Creek Lane, Apex, NC, stated that the County needs water and that they need to decide where it should go. He stated that there was no discussion about the Chatham border moving east and the needs for water in this area; that he questions where the water is going to go, to new developments or to old developments as well; that bringing water in will attract business and that there needs to be a business plan so that people are not overtaxed; that they should be able to dump the water someplace as well; that there are a lot of questions that need to be integrated into the whole process; that even over ten years, it will be expensive on a per household basis; that integrating the planning process with water is critical; and that he questions how this will merge with the Town of Pittsboro.

Commissioner Barnes stated that he is in favor of the Harnett County interconnect; that there was a study done in 1995 on sewer needs; that a month ago, DENR stated that the sewer capacity for Chatham is nil; that Chatham County was the last in the trough; that if someone had paid attention to the report eleven years ago, the County might be in a different place; that growth will continue, and even if it is stopped in its tracks, the County will still need the water capacity; that this Board cannot sit and ignore the facts; that he has strong feelings about Jordan Lake; that twenty years ago, the Board decided not to worry about water and thought that they would deal with it later; that there will be only two intakes into Jordan Lake; that there is presently one intake in place which is owned by Cary; that by their graciousness, they allow the County to tap on to their intake; that the County pays Cary for every gallon of water that they take out of the lake; that if the County started the permitting process immediately for a western intake, it would take approximately four years to go through the environmental and permitting process; that it looks like seven to eight years before there would be a plant ready to pump any water; that there then needs to be pipelines that would connect to the current system; that realistically, the County could look at eight to ten years; that if the County turns Harnett County's offer down, they will take that water and sell it to Fort Bragg; that Chatham County got lucky in their arrangement with Harnett County; that Chatham can sell its interest in the Harnett County water supply in the future; that the County's plant is very temperamental; that it would take two to three years to add on to or bring the current plant up to date; that if the County expanded to get its six million gallons, it had better hope to get an intake on the west side; that he would just about guarantee that if, in three years, the County returned to Harnett County, the deal that Chatham County now has is much less

than what it would be then.

Cheyney Hales, 528 Will Be Lane, Siler City, NC, stated that any system that encourages commercial and residential growth in the Rocky River Watershed is a bad idea; that any system that encourages a sustained investigation and implementation of best management practices for increasing the health of the Rocky River Watershed Ecosystem is a good idea; that this is based on the State of North Carolina's evidence presented to him by a State Forester that commercial and residential development are now the leading cause of pollution to North Carolina's surface waters; that the North Carolina Wildlife Resources Commission is heavily invested in a well thought out fifty-year action plan for increasing the health of the State's ecosystems, economic systems, and social systems simultaneously; that the ideas of irreplaceable value, configuration dynamics, and inclusive planning priorities and tools are key to success; that he would like the Board to think of the value of all the plants and animals in the Rocky River Watershed Ecosystem; that he wonders what it would cost to purchase and restore the habitats, plants, and animals that are already there, then nourish and sustain them to grow to the state of health they are in now; that to price the cost of importing a sixty-year old White Oak or a large stand of White Pines or a few dozen river otters, or healthy populations of the threatened Red Horse Sucker and the endangered Cape Fear Shines; that the value is irreplaceable because recreating the system later can never be afforded; that configuration dynamics were explained to him by four men of great service to our State; that Congressman Ike Andrews told him that one could judge the impact of a new feature on the landscape by the way the configuration of things change around that new feature, twenty years later; that he cited Jordan Lake as an example; that it was designed to mitigate flood and pollution; that now it is key to the water and sewer and systems that enable development for our region; that banking magnate, George Watts Hill, told him that he gave a multi-thousand acre forest to the State as a protected watershed for Durham so the Research Triangle Park he fostered could have a good chance from the beginning; that Governor Terry Sanford told him that he discovered that the biggest impacter of water quality in the State was DOT with all the roads, which spawned development, which needed more roads, that just because an operation is in compliance does not mean that there are no perversely negative impacts; that Dr. John Costlow, former major of a rapidly developing coastal town, marine laboratory manager, and consultant to the nation of Portugal told him that every time a new road or a new home or a new waterline is built, the ecosystem around it is changed forever, and that thoughtful planning is the key.

Mr. Hales stated that planning priorities can encourage good conservation practices in the County's watershed ecosystems as the Wildlife Commission has outlined; that using that outline might summarize that providing no waterline along the Rocky River Watershed corridor at this time will:

- Reduce the most serious threat to water quality, residential development and it's configuration dynamic of more roads and businesses
- Sustain an existing system with little current protection, the Rocky River Watershed Ecosystem
- Allow time for filling knowledge gaps with new information using predictive analysis modeling via the County's Geographic Information System, the same tool used by business and industry to run "what if" scenarios like:

"What if tax in the watershed was based on impervious to non-impervious surface ratios?" Or "What if farm-status-tax-breaks included the demonstration of low impact practices in services like hunting leases, animal training, environmental education, sustainability and not just the sale of products?"

- Provide a very high cost/benefit ratio. The County's cost for sampling the success of other governments in watershed management, and running predictive analysis is

extremely low compared to what it would cost to purchase and restore the habitats, plants and animals that are already in the watersheds, then nourish and sustain them to grow to the state of health they are in now.

- Create opportunities for funding and partnerships to protect irreplaceable ecosystems that currently exist.
- Reduce cost of the future projects mandating ecosystem restoration, new water and sewer systems required to treat water of lower quality, and the hidden cost of unplanned development.

Ray Greenlaw, 2 Jordan Drive, Pittsboro, NC, stated approximately three years ago, the Board of Commissioners adopted a long-range water distribution plan; that Chatham County has a State allocation of six million gallons per day allocation from Jordan Lake; that the County can accommodate and treat approximately three million gallons per day; that the fundamental components of Chatham's water treatment facility can treat and disperse approximately six million gallons of potable water; that given the total expansion of Chatham County's water system, the projected consumer consumption will far exceed the extended County water system; that the signed adoption of the chair of the Chatham County Board of Commissioners is dated January 20, 2004; that this was the Long Range Water System Plan; that at this junction, Chatham County has contract with Harnett County to withdraw six million gallons per day from Harnett County's available water supply; that during its first meeting in the months of November, 2004, the Chatham County Board of Commissioners allocated approximately \$80,000 to its contractor to conduct a County-wide "Wastewater Treatment Study"; that in December, 2006, with the North Carolina State and water officials, the State concluded that Chatham County does not have an available allocation of wastewater capacity; that he asks the Board, as an informed citizen, "Where do we go from here?"; that and "How much more of this \$80,000 has been spent today on the study?". He thanked the Board for listening to his comments.

Elaine Chioso, 1076 Rock Rest, Pittsboro, NC, stated that she is speaking on behalf of the Haw River Assembly; that they do not want to wash their car with drinking water; that everyone needs to figure out how to use water more wisely; that she agrees with the first speaker and that we should look at the big picture; that the Harnett County deal sounds like a good deal but is based on a development pace that no longer exists; that the County should go ahead and plan to expand the plant; that the County needs to look at everything that encompasses water; that there is a lot of stress on the County's water sources; that there are new regulations on Phase II stormwater and Jordan Lake nutrient rules; that they will all affect how citizens use water in the County; that it is not going to be cheap, but no idea is; that we have the ability to grow canola crops to use in biofuels; and that the greater question is how water is used.

Loyse Hurley, 16 Matchwood, Pittsboro, NC, President of Chatham Citizens for Effective Communities, stated that she is speaking on behalf of CCEC and many of the citizens of the County; that all citizens need to understand the problems associated with managing the County now and for the future; that these water issues and their long term effects are crucial to the County; that the Board is faced with some difficult decisions: 1) How to supply the current county needs; 2) How to predict the future and provide for those uncertain needs; 3) How to make the best decision in a short period of time; and 4) How to be good stewards of the public's money.; that this water supply issue requires an overall assessment and comprehensive planning for the future, but it also needs immediate action because of the long lead time for construction and implementation; that when CCEC reviewed all the information supplied by Hobbs, Upchurch & Associates and considered all the discussions at the work sessions over the years, they tried to come up with a recommendation and found that additional information is needed; that the information supplied thus far, doesn't consider other options, such as a consortium with other areas, or perhaps other sources of supply; that she asks, "What would be the time line and what would be the costs? Who would be involved?"; that as explained tonight, the Harnett County Option #2

appears to be the best one, since it would provide 12 MGD, an estimated 20 year capacity, and include the expansion of the plant to it's full 6MGD capacity; that the Jordan Lake allocations are to be considered by the Army Corps in approximately four to five years; that it doesn't appear that the County would be deserving of an additional allocation, if it hasn't fully used its current one; that this leads to other questions: "Would the upgrade of the plant be completed in time? Would we be able to show the Army Corps that we have additional needs? What impact will a thriving economic development plan have on our future needs?"; that under all the options, once the lines from Harnett County are in, the County will have to run one MGD water through them, and this will cause short term problems until the approved developments come on board; that there is a major downside to Option #1; that it does not provide for the upgrade of the current plant; that they wonder if the Army Corps decide that the County has met its needs, if it will utilize the supply from Harnett County, without an upgrade of the plant; that they think not; that unfortunately, the Board is now faced with a need to fast track this decision and not have the luxury of taking time to study, consider and come to a sound, well-planned and thought out decision; that the County needs the water and it needs it soon; that perhaps Option #2, for the supply from Harnett County plus the upgrade of its current plant to its full capacity can solve its immediate ten to twenty year projection and is the way to go, but this can not be the end of the project; that the Board will need to pursue the consortium idea so that Chatham can continue to grow and prosper; that this would include pursuing an intake on the western side of the lake; that water is the essential basic commodity that all must have; that on a related issue, they strongly recommend that the Board hire a County Engineer without further delay; that it is intolerable that the County continue to have purification problems with its water supply; that additionally, a 20% water loss within the system appears to be excessive; and that the County needs to get its current plant and system into a more reliable condition and the expertise of a County Engineer is badly needed.

Kathleen Hundley, PO Box 1177, Pittsboro, NC, stated that she is speaking on behalf of the friends of the Rocky River; that the water lines will open up the County; and that the water basins must be protected from what is sure to happen.

Diana Hales, 528 Will Be Lane, Siler City, NC, stated that she is with the Friends of the Rocky River; that the conditions on the river are not always good; that the wastewater treatment plants will make a huge impact on the rivers; that where the water goes is of supreme importance to many people; that the County needs to safeguard the natural resources; that there are over one thousand landowners that abut the Rocky River; that they must look closely at land use planning; that the County may need two sedimentation officers; that there should be a stream survey done; and that there are approximately two miles stream feeders intermittent for every one mile of river. She asked that the maps be placed on the County's web site.

Sonny Keisler, 3606 Rocky Fork Road, Sanford, NC, stated that he lives on the Rocky River; and that the best of land use planning must be used in the Rocky River watershed.

Randy Voller, 21 Randolph Court, Pittsboro, NC, stated that Pittsboro has excess capacity, store 1.7-2 million gallons, and could sell water to the County; that they should look to cooperate in that area; that they should use more reuse systems and it might mitigate some of the need; and that all the situations be looked at before the Board commits to one source or the other.

Elliot Cramer, 1799 Crawford Dairy Road, Chapel Hill, NC, stated that he has spent ten years predicting water; that engineers are historically bad at predicting water usage; that the *News & Observer* incorrectly reported usage; that sales have been historically flat; that it is inconceivable that the County will actually use that much water; that Hobbs, Upchurch & Associates made erroneous claims back in 1999; that he believes that the problems in 1999 were due to the water plant operating on only one shift; that he recommended purchasing water from Durham back then; and that he urged the Board to talk to

the State.

John Alderman, 244 Red Gate Road, Pittsboro, NC, stated that he is President of Alderman Environmental Management Services; that he is a biologist; that the Southeast is a strange place relative to the rest of the County; that water can pass through as many as 70 toilets before it comes out of your tap; that many of the endangered species are disappearing; that many of the species in Chatham are not on the federal list; that there is a tremendous amount of discharge into water sources here; that he is tired of what he is seeing in the business; that he recently surveyed the freshwater mussels in Harnett County and there was no reproduction; that that is a bad sign; that years ago in Chatham County there was a proposal for economic development in Chatham County and it was studied at length; that the Board voted against a hog rendering plant in Bynum; that in terms of impervious surfaces, the latest research is showing that it is not 5%, 10%, or 20% impervious surface before one starts seeing impacts on aquatic species and drinking water supplies; that with anything more than 1-2 per 2.4 acres there is an impact so stormwater had better be managed; and that everyone needs to read Ecclesiastes 3:19 and think about what is being done now before it is done.

RECESS

The Board recessed for a five-minute break.

Sally Kost, 1101 New Hope Church Road, Apex, NC, stated that she is always talking and concerned about money; that the County is supplementing the enterprise fund with general fund tax dollars; that she would like to see the tap fees set in such a way that they will the debt service on what will have to be borrowed to pay for the infrastructure and service; that some may not be able to afford to tap on, but it may be covered by grants; that she questioned what is known about groundwater supply; that she wonders about the quality and quantity of supply; that she questions the impact on her well; and that the County needs to be totally in sync with the municipalities.

Greg Solomon, 406 Buck Branch, Pittsboro, NC, stated that with seven thousand new customers, there are ten thousand new homes; that the growth numbers came from developers; that Chatham County is not an average county; that he wants the Board to look at all options; that he questioned how fast the County has to act on this; and that he asks the Board not to rush on this matter.

Jeffrey Starkweather, 590 Old Goldston Road, Pittsboro, NC, stated that he had a couple of questions about the western transmission main; that it is quite a bit less to buy into the Cary intake than to buy water from Harnett; that it is a matter of weighing risks; that by having a savings plan in effect, it would raise the County's chance of receiving the allocation; that the risk is that the County is spending a lot of money that it may or may not need to do; that if the County didn't have that demand, the taxpayers would have to pay the bill for the facility costs; that having the extra water takes away the incentive to conserve; and that nothing concentrates the mind more than a deadline.

Commissioner Lucier stated that water issues is an extraordinarily complex issue; that some difficult decisions must be made in the not to distant future; that they will have to explore, as part of the decision making process, cooperative agreements with the different regions (OWASA, Durham, etc.); that there had not been a quorum exchange with OWASA since 1999 on water issues; that this needs to be done now; that they need to look at the relationships with municipal governments; that if they can do things together, it will be cheaper and less costly for the taxpayers; that they have to think about the options of the people who will be hooking up; that there are a number of things they must struggle with in regards to cost, and that he appreciates everyone coming out as they struggle through this.

ADJOURNMENT

The County Manager thanked everyone for coming.

The meeting was adjourned at 8:22 PM.

Carl Thompson, Chairman

ATTEST:

Sandra B. Sublett, CMC, Clerk to the Board
Chatham County Board of Commissioners