

CUMBERLAND COUNTY BOARD OF COMMISSIONERS
APRIL 19, 2010 – 5:00 PM
COURTHOUSE - 117 DICK STREET - ROOM 118
SPECIAL MEETING FOR WATER PROJECT UPDATE

PRESENT: Chairman Billy R. King
Commissioner Jeannette Council
Commissioner Kenneth Edge
Commissioner Marshall Faircloth
Commissioner Ed Melvin
Commissioner Phillip Gilfus
Commissioner Jimmy Keefe
James Martin, County Manager
Juanita Pilgrim, Deputy County Manager
Amy Cannon, Assistant County Manager
Rick Moorefield, County Attorney
Tom Cooney, Public Utilities Director
Sally Shutt, Communications Manager
Bill Berry, PWC
Marie Colgan, Clerk to the Board
Candice White, Deputy Clerk to the Board
Press

Chairman King called the meeting to order and recognized James Martin, County Manager. Mr. Martin called on Tom Cooney, Public Utilities Director, to provide an update on the county's water projects to include the Gray's Creek Water and Sewer District.

Mr. Cooney stated his presentation would mainly focus on the Gray's Creek project and would highlight costs and , benefits of various proposals for providing district wide water in the Gray's Creek Water and Sewer District, Mr. Cooney further stated he would also present options available for getting water service to the Southpoint community which is located in Gray's Creek. Additionally, Mr. Cooney stated updates would be presented for Bragg Estates, Overhills Park, Brooklyn Circle, Cedar Creek Road, NORCRESS Water and Sewer District and East Jenkins Street. Mr. Cooney displayed a map and pointed out the public utility project locations.

Mr. Cooney presented the background or history of the need for the Gray's Creek Water and Sewer District as follows:

- There is no significant public water supply available in this area of the county or within the county as a whole with the exception of the Eastover Township; the Eastover Sanitary District is moving towards expansion of their water system
- Existing private supply is primarily shallow aquifers
- Shallow aquifers are subject to contamination
- Current state and health department well testing primarily looks for bacterial contamination; health department will send sampling to the state for chemical or

petroleum related contamination testing if requested by the property owner, the cost of the testing will be paid by the property owner.

- An existing petroleum related release is impacting the Southpoint area of Gray's Creek on Chicken Foot Road; three affected wells known to date
- The Board of Commissioners has set a goal to provide clean, safe water to county residents

Mr. Cooney followed with a review of efforts completed to date as follows:

- The Board of Commissioners recognized the need to evaluate the existing practice of using shallow wells to sustain the needs of the rural population
- Last summer the county had a feasibility study performed and completed by the engineering firm of Marziano and McGougan in a limited partnership with Koonce, Noble and Associates; the two firms also represent and developed the county-wide water systems for Robeson, Hoke, and Harnett counties
- The Gray's Creek area was identified as the first feasible area to begin the process of creating a county-wide water system; there was enough population and density in the district to support installation of water lines in a cost-effective manner
- The Board of Commissioners created the Gray's Creek Water and Sewer District on October 19, 2009
- The application to the United States Department of Agriculture (USDA) for funding was submitted in October 2009
- Engineers were tasked with preparing a Preliminary Engineering Report (PER) and Environmental Assessment (EA) and preparing the application documentation for the USDA
- The PER and EA were delivered to the county and the USDA in March of 2010 and are in the process of being reviewed by the USDA

Mr. Cooney outlined four (4) funding options as follows:

1. United States Department of Agriculture (USDA)
 - Low interest loans - 4.5% - term of 40 years
 - Some grant funding; however, this project is not eligible for grant monies
2. North Carolina Rural Economic Development Center (NCREDC)
 - Cumberland County is categorized as an urban county and is not eligible for most of their programs
3. North Carolina Department of Environment and Natural Resources (NCDENR)
 - Low interest loans - typically 1.5% or 2% - term of 20 years
 - Short term length results in higher debt service payments
4. Cumberland County
 - Special assessment – 6% to 8% - max term of 15 years depending upon the size of the project and what is to be accomplished; rate and assessment will usually determine the term

Commissioner Gilfus inquired regarding the basis for the Eastover Sanitary District USDA grant award. Mr. Cooney explained award of the grant was based on the actual income as reported by the census or specific salary studies that may have been conducted. Mr. Cooney further explained the reported income from the last census for the Gray's Creek area was \$1,300 per residence over the USDA grant eligibility requirements so

subsequently the area is not eligible for grants but is eligible for loans. Mr. Cooney stated the USDA and county attempted to make the area grant eligible by looking at populations and individual precincts, but there was no way to make it work.

Mr. Cooney continued with his outline of Cumberland County funding options as follows:

- Direct financial participation
- Bond referendum if approved by the voters within the subject district.

Mr. Cooney presented information regarding the Gray's Creek Water and Sewer District as follows and stated the project was based on population projections:

- Phased expansion approach over a 12 year period – 5 phases,
 - Population projections for the district with expected demand for capacity
- 2010
Potential customers – 1,080
Expected demand – 189,061 GPD (peak 374,341 GPD)
- 2029
Potential customers – 6,496
Potential demand – 1,500,580 GPD (peak 2,250,870)

Mr. Cooney explained the 2029 potential customer number is based on population projections and build out of the district for expanded water service where feasible in two to three year increments. Mr. Cooney further explained the feasibility study recommended attempting other areas in the county identified as possible districts. Mr. Cooney stated expected and potential demand is also based on population estimates.

Mr. Cooney reviewed PER options for expansion of the Gray's Creek Water and Sewer District as follows:

Option 1: No action – creates no cost but produces no benefits.

Mr. Cooney explained this is not a viable option as there are issues with contaminated wells and there is demand from the community for water service.

Option 2: Build our own Water Treatment Plant

- Estimated cost - \$19,122,673
- Benefits – the district would control its water rates, its production and distribution systems
- Limitations – this is the most costly option; the state regulatory authorities may consider it as a competing treatment facility with the Public Works Commission PWC

Mr. Cooney stated state regulatory authorities are looking at regionalization of waste water and water systems as a lot of communities are in violation of their permits because they can not afford to maintain and operate their facilities. Mr. Cooney further stated should the county decide to build its own water treatment plant, the state would take under consideration all the factors supporting that decision.

Commissioner Keefe inquired regarding the GPD capacity for a county water treatment facility at the cost as estimated. Mr. Cooney responded capacity would be three to five million GPD with the goal to design a facility that would accommodate future expansion as demand for capacity increases. Commissioner Keefe inquired whether plans would be to build a single water treatment plant to serve the ten potential water districts in the county. Mr. Cooney responded the ideal would be to construct one facility with the capability to plumb water where needed; however, should the Board opt to build several facilities, siting of the plant and the cost for running lines would have to be calculated.

Commissioner Edge inquired whether it would be difficult for Cumberland County to get authorization from the state to build a water treatment plant since both the PWC and the Bladen Bluffs are pumping or plan to pump water from the Cape Fear River. Mr. Cooney responded the state would expect justification for doing so because the PWC and Harnett County have plenty of capacity and Bladen Bluffs currently is under construction and will have limited capacity available. Mr. Cooney further responded the river contains water ample to sustain the facilities but whether it would be a feasible move is an issue that would be debated.

Option 3: Install and operate our own well system

Estimated cost - \$11,704,063

Benefits –

- The district would control its water rates, production and distribution systems
- Ground water treatment costs are usually less than surface water treatment systems

Limitations –

- Well systems generally lose production capacity over time
- Once constructed, there is no guarantee of producing enough water to meet the demand
- Requires additional land purchases for wells and equipment

Mr. Cooney explained one of the reasons the Bladen Bluffs plant has been permitted and is under construction is because well water in this portion of the state is heavily used and as a result, the water table is going down in areas of industrial use. Mr. Cooney further explained another issue is that wells can lose capacity over time and it is difficult to locate water in some areas of Cumberland County.

Option 4: Partner with the City of Fayetteville's PWC

Mr. Cooney stated from a financial perspective, Option 4. was recommended by the engineers because the PWC currently has three lines going into the Gray's Creek Water and Sewer District that the county could tie into in order to extend the system.

Estimated cost - \$6,033,880

- The estimate cost does not include the cost of an elevated storage tank that will be needed for future expansion of the district services

Benefits –

- The PER identified this option as the least costly option
- PWC has the capacity and capability to provide needed services

- The district would have less regulatory compliance issues by not operating the treatment process

Limitations –

- The district does not have a voice in the governance of the PWC

Commissioner Melvin inquired regarding the cost of an elevated storage tank. Mr. Cooney responded the cost is between \$.5 million and \$.75 million.

Mr. Cooney displayed maps and identified the Gray’s Creek Water District proposed phase 1a water mains and the proposed phase 1b water mains associated with Option 5. Mr. Cooney explained the Southpoint area would be served by a line coming in from Bladen County because it would be cost prohibitive to extend water from the northern end of the county. Mr. Cooney stated there has been developer interest in getting water to the area and Phase 1b construction may involve developer participation. Mr. Cooney further stated at the present cost estimate, an equal assessment would be somewhere in the area of \$6,000 per property. Mr. Cooney stated Southpoint is included in the Gray’s Creek scope regardless of the option selected, but it could be considered a separate project.

Option 5: Partner with the Lower Cape Fear Water and Sewer Authority

Estimated cost - \$15, 790,580 which includes:

• Capacity fee - \$7.75/1,000 gallons (300,000 GPD)	\$2,325,000
• Water main and elevated tank	\$6,550,000
• Phase 1a construction	\$4,377,500
• Phase 1b construction (Southpoint)	\$ 439,500
• Design and other costs	\$2,073,580
• Total Estimated Cost	\$15,790,580

Mr. Cooney stated the total estimated cost is mainly associated with purchasing capacity and getting the water from the plant into the county project area using a 16 inch water main along Highway 87. Mr. Cooney further stated the approximate construction cost to run the lines through a partnership with the PWC is a little over \$6 million.

Mr. Cooney stated the Bladen Bluffswater plant was created to produce 4 million GPD, of which 3 million GPD was obligated to the Smithfield Packing plant as the primary customer. Mr. Cooney further stated since entering into the contract with the packing plant, water reclamation and recycling efforts reduced their demand to 3 million GPD and the plant has asked the Authority to market the remaining supply. Mr. Cooney advised the county would need less than 500,000 GPD maximum and should Option 5 be the route selected, there is an opportunity to phase in the capacity and secure obligations from the Authority.

Commissioner Melvin inquired whether the line would run down Chicken Foot Road into Southpoint. Mr. Cooney responded the line would run along Highway 87 and if Option 5 is selected, there would need to be a rerouting of lines in the proposed project area. Mr. Cooney stated all routing possibilities and population would have to be reviewed regardless of the option selected.

In response to a question posed by Commissioner Keefe, Mr. Cooney stated the capacity fee is a one time fee, and is based on the construction cost of the plan and financing. Mr. Cooney

further stated during the current phase of construction, the plant design can be modified for additional capacity.

Benefits –

- A commitment from the Authority to provide the county with a seat on their Board of Directors provided we buy into capacity of their new facility, Bladen Bluffs, in Tar Heel, NC
- Facilitates the development of a county-wide water system
- The district would have less regulatory compliance issues by not operating the treatment process

Commissioner Keefe inquired whether a cost analysis had been conducted to determine the monthly water cost to property owners for both the PWC and the Lower Cape Fear Water and Sewer Authority. Mr. Cooney responded an analysis had been conducted but the figures were inaccurate. Mr. Cooney stated the PWC option is presently \$45 per month with the majority being debt service and only about \$14 being for water. Mr. Cooney further stated Eastover is a similar scenario. Mr. Cooney stated Bladen Bluffs would about triple the monthly cost, and there would need to be funding from another source and a commitment from the Board to help finance the project.

Limitations –

- \$9,756,700 initial higher cost than Option 4

Mr. Cooney shifted the focus of his presentation to Southpoint and provided an overview of the following:

- Shallow aquifer ground water contamination from a leaking underground storage tank (petroleum)
- Three properties currently affected by contaminated wells:
 - One affected property in Southpoint has received a well filtration system from the state
 - One of the properties on County Line Road has no treatment system and the resident has been reluctant to allow state personnel to sample her well
 - The third property has been vacated but has requested a filtration system from the state due to the need for the family to reoccupy the residence
- Bladen County is willing to provide bulk water for this area of the district
- The design of the distribution system has been completed and submitted to the state requesting approval to construct the system
- Once approval to construct is received from the state, the only question remaining is how does the county fund this particular project

Mr. Cooney then presented project questions for the Southpoint Subdivision in Gray's Creek Water District as follows:

Is there an immediate need for this project?

- There are 85 residences that can be serviced and will be affected by the project
- There are only 3 properties known to have contaminated wells at this time
- 1 has a filtration system installed by the state (Southpoint)

- 1 is negotiating for a filtration system and is currently unoccupied (County Line Road)
- 1 has not cooperated with sampling efforts (adjacent to the vacant residence on County Line Road)

If the county moves forward with a special assessment project:

- This portion of the phase 1 for the district is approximately \$440,000 and is included in the overall cost estimate for phase 1 of the district
- A preliminary estimate of the assessment is over \$6,000 on an equal per lot basis
 - This is a very rural area of the district and it would more equitable to use an acreage assessment, the value of which has not been calculated
- This may negatively affect the outcome of a required bond referendum for the remainder of the district.

Commissioner Edge inquired whether the contamination was moving. Mr. Cooney stated it is migrating and will eventually migrate into the subdivision, but it is not moving quickly. Mr. Cooney further stated a decision needs to be made as to whether there is an immediate need that would require a special assessment project or whether the need can wait until a decision can be made about the Gray's Creek area. Mr. Cooney stated the three properties are being served by the state for their immediate drinking water.

Commissioner Keefe inquired whether a new well or filtration system had been considered. Mr. Cooney explained sinking a new well in the area risks pulling the contamination into the production line at a much quicker rate and the well would have to be placed outside the area which would incur costs for running the lines and meeting all the regulatory requirements. Commissioner Keefe inquired whether the contamination migration could be retarded. Mr. Cooney stated the state is considering putting in a remediation system for the site but he does not know to what extent or the current status.

Commissioner Melvin inquired regarding the cost to run the lines for the water main to Southpoint. Mr. Cooney responded \$440,000 based on eighty-five properties for an equal assessment of a little over \$6,000 which includes the cost of construction and setting of the meter box. Mr. Cooney explained property owners would have to run the line from the street to the residence. Commissioner Melvin asked whether affordable financing could be arranged. Mr. Cooney stated Board action would set the rate and the terms, and the maximum term by law is fifteen years. Commissioner Keefe inquired regarding the cost per month for water in Southpoint. Mr. Cooney responded typically \$15 per month because the assessment would not be part of the rate but a separate bill from the county. Mr. Cooney stated the total cost would be narrowed down to specific numbers before the referendum so they could be provided to the community.

Commissioner Melvin inquired regarding what percent of the eighty-five property owners would need to be in favor of the project. Mr. Cooney stated typically with assessment projects, the majority of the property owners petition for service and in the one case involving contamination, the Board has acted in the best interest of public safety with assessments to all property owners having access to the water line.

Mr. Cooney stated at some point, the Board will need to provide direction whether to wait for results from a referendum for a district-wide water system or whether to move

forward in the immediate future with an assessment project in the area. Chairman King inquired regarding Mr. Cooney's recommendation. Mr. Cooney recommended waiting on the results of the referendum because the affected Southpoint residents are currently being served by bottled water and there is a potential financial impact for the eighty other property owners who may be comfortable with the current water situation and not feel a need until their water is contaminated.

Commissioner Edge inquired whether there would be an equal assessment in a bond issue. Mr. Cooney responded there would not be an assessment on a bond issuance but a long-term debt with a monthly bill which would eliminate property owners from having to pay back \$6,000 in a short period of time. Mr. Cooney stated costs actually turn out to be similar for long-term debt and for a short-term assessment. Mr. Cooney explained the difference is that an assessment bears a higher interest rate and a shorter term for pay back.

Commissioner Keefe asked how long before the seepage in the contamination would affect the other eighty properties. Mr. Cooney responded there are too many factors involved to estimate.

Chairman King inquired regarding requested action by the Board. Mr. Cooney stated he would like for the Board to consider a date for a bond referendum for the Gray's Creek area to include Southpoint. Mr. Cooney further stated the Board should also consider which option to pursue in order to provide service. Mr. Cooney advised the decision needs to be made relatively soon in order to secure financing through the USDA. Mr. Cooney further advised the least expensive option is a partnership with the PWC. Mr. Cooney further advised the option that allows a voice in ownership, even though more expensive than doing well systems, is a partnership with the Lower Cape Fear Water and Sewer Authority. Chairman King inquired regarding the costs associated with each. Mr. Cooney responded there is a \$9 million difference.

Commissioner Council inquired about the possibility of receiving a timely answer from the PWC and the Lower Cape Fear Water and Sewer Authority. Mr. Cooney responded the PWC is ready to work with the county and has verbally agreed to the same rates as they charge the Town of Stedman. Commissioner Council asked if there was a possibility that the rate could change from that quoted prior to the bond referendum. Mr. Cooney responded there is always that possibility although he expects the PWC to hold to the rate as quoted.

Commissioner Edge stated the PWC charges more for county water than they do for city water and they are contemplating increasing rates to county residents 5% per year for the next three years. Commissioner Edge inquired how this would affect the \$9 million fee. Mr. Cooney stated it would bring the fee down slightly because the actual rate for water is a very small portion of the cost; the major cost is associated with construction to put the lines in the ground.

Commissioner Gilfus inquired whether the expected growth in the Gray's Creek area was factored into the costs associated with the Lower Cape Fear Water and Sewer Authority. Mr. Cooney stated the sixteen inch water main coming from the plant to the Gray's Creek

area will handle all future growth in the area. Mr. Cooney further stated the only item that is not covered is the cost of future capacity from the plant.

Commissioner Melvin inquired regarding the cost to run the six mile water line from Bladen Bluffs to the county line. Mr. Cooney stated the actual line estimate is about \$6,600,000 which includes the line work and elevated storage tank; however, there has been no discussion regarding the booster pumps that will be needed to get water out of the plant and into the line. Mr. Cooney further stated the Lower Cape Fear Water and Sewer Authority may consider participating in this cost or could place it on the county.

Commissioner Keefe asked whether the PWC could be the county-wide water supplier. Mr. Cooney stated as it stands now he does not see how the PWC could, but that could change depending on the PWC's focus and future operations. Mr. Cooney pointed out each county district has its own set of unique and different circumstances.

Commission Faircloth inquired regarding timing for placing the bond referendum on a ballot. Mr. Martin responded should the Board decide to partner with the PWC as the supplier of the water for the currently planned Gray's Creek Water and Sewer project, the Board of Elections would need to know by June for a referendum in November 2010. Mr. Martin stated the referendum does not necessarily have to be held in November 2010, but that is the next county-wide election. Mr. Martin advised a special election could be held for the Gray's Creek Water and Sewer District.

Commissioner Council recalled concerns expressed at the time the district was formed regarding annexation and asked whether annexation was completely out of the equation or was it tied to the water. Mr. Cooney responded the city makes a business decision regarding whether to annex and the County Attorney can better respond regarding whether financing through a USDA loan would prevent annexation by the city. Mr. Cooney stated the city could not take over the county's utilities, but they could annex the areas and not provide the service.

Mr. Cooney stated his Gray's Creek Water and Sewer District presentation was completed. Chairman King inquired of Bill Berry from the PWC whether he had any information to share. Mr. Berry stated he had not been privy to all the PWC discussions and it would not be prudent for him to respond. Chairman King stated the Board would carry discussion forward.

Mr. Martin advised there has been discussion with representatives of the city that the city's interest in having county participation in the downtown parking deck and the county's interest in participation by the PWC be put together into a consolidated memorandum of understanding or interlocal agreement that would include specifics about both the city's and county's commitments. Mr. Martin stated his understanding is that the issue is how soon the city and the PWC can come forth with their statement of what they are willing to do regarding the extension of county water. Mr. Martin further stated he is not sure about the timeline involved.

Commissioner Gilfus inquired regarding the county's position related to the parking deck. Mr. Martin stated the county's unofficial position is that it would agree to provide

funding based on the incremental increase in the taxable value of the city's Municipal Service District (MSD) with the increment being determined by the base 2009 revaluation values.

Mr. Cooney provided a brief update on additional projects as follows:

Bragg Estates – Sewer Project

- 163 properties
- Estimated cost of the project is 3 to 5 million dollars
- Failing septic tank systems – Health Department had had to take action due to sewage discharging to the surface of the land
- There has been no additional activities on this project

Overhills Park – Sewer Project

- 370 properties to be served
- Estimated cost is 3 million dollars
- Failing septic tank systems have resulted in the Environmental Court evicting residents from the properties
- Tasks completed:
 - Engineering firm of Marziano and McGougan was contracted
 - Design of the sewer system completed and submitted to the state for approval to construct
 - An application for funding from the USDA has been submitted
 - This project is loan and grant eligible although the county does not know the funding breakdown yet
 - The PER has been submitted to the USDA and an initial review completed; revisions and clarification will be made to the PER

Brooklyn Circle – Water Line

- 17 properties served
- Cost is \$84,387 (county \$21,096; PWC \$12,693; property owners \$50,597)
- The project has been completed and the county is awaiting the final change order to close out the project.
- The next step is to determine the assessment and publish the final assessment role

Cedar Creek Road – Water Line

- 25 properties served
- Estimated cost \$140,000 (county participation not to exceed \$75,000; remainder to be assessed to the property owners)
- The project has essentially been completed with the exception of one additional meter location
- The county is awaiting the final change order to close out the project
- The next step is to determine the assessment and public the final assessment role

NORCRESS Water and Sewer District – Issues

Hydrogen sulfide gas

- Has resulted in damages to manholes in the Town of Wade

- There are increased costs associated with trying to control the problem
- The county is in the process of testing a new chemical treatment which could reduce the cost of operating the lift stations

Inflow and Infiltration

- Stormwater and/or groundwater is getting into the system in the Godwin and Falcon areas
- The county is working on getting the system smoke tested to look for leaks
- Cumberland County has become a member of the NC Rural Water Association which provides assistance with testing and training.

Rates

- The county is in the process of reviewing the rate structure to assess the recent increase in treatment and the costs associated with the chemicals used to treat the lift stations

East Jenkins Street – Water

- Solvents related to the dry cleaning industry have contaminated the shallow ground water wells in the area of East Jenkins Street near the coliseum
 - The state has been monitoring the release
 - The state has contracted with an engineering consulting firm to develop plans and coordinate with the PWC for a water extension into this area (some of the area is already served by the PWC)
 - At this time there is no action required of the county as the dry cleaning industry has a special fund to address these types of problems.

The meeting adjourned at 6:16 p.m.

Approved with/without revision:

Respectfully submitted,

Candice H. White
Deputy Clerk to the Board