## Minutes of the Special Meeting of the Union County Board of Commissioners July 14, 2009

The Union County Board of Commissioners met in a special meeting on Tuesday, July 14, 2009, at 9:00 a.m. in the Personnel Training Room, Room 131, First Floor, Union County Government Center, 500 North Main Street, Monroe, North Carolina. The purposes of the special meeting were for the Board to receive and consider: 1) a presentation of Water and Wastewater Needs Summary: 2) a presentation regarding the Union County Public Works Capital Improvement Plan (CIP); 3) an update regarding utility contracts for the County; and 4) a Proclamation to Proclaim July 15, 2009, as Piedmont Natural Gas "Share the Warmth Day" in Union County. The following were

PRESENT: Chairman Lanny Openshaw, Commissioner Allan Baucom, Commissioner Tracy Kuehler, and Commissioner

A. Parker Mills, Jr.,

ABSENT: Vice Chair Kim Rogers

ALSO PRESENT: Al Greene, County Manager, Matthew Delk, Assistant County Manager; Lynn G. West, Clerk to the Board of

Commissioners; Jeff Crook, Senior Staff Attorney; H. Ligon Bundy, Attorney at Law; Ed Goscicki, Public Works Director; Kai Nelson, members of the Public Works Staff, members of the press, and interested citizens

At approximately 9:15 a.m., the Chairman convened the special meeting and recognized Al Greene, County Manager, for comments.

Mr. Greene stated that the staff wanted to focus mostly on utility issues. He stated that the staff would be making a broad presentation on the County's water and sewer capacity needs and capacity generating projects of water and wastewater, in both the Catawba and Yadkin Pee Dee Basins. He said that staff also wanted to get into a more detailed discussion on the capital needs in

terms of a one to four-year capital improvement program. He stated that during these discussions today, there will be an opportunity for the staff to update the Board regarding its discussions with Monroe and Anson County on partnerships and the status of those discussions.

Mr. Greene stated that the Board also has included on its agenda the consideration of a Proclamation from Piedmont Natural Gas to proclaim July 15, 2009, as Piedmont Natural Gas "Share the Warmth Day" in Union County.

He introduced Pete D'Adamo and Kevin Mosteller from HDR Engineering and Laurin Kennedy from CDM.

Ed Goscicki, Public Works Director, said that the County has done a significant amount of water and wastewater master planning over the years. He reviewed the agenda for today's presentation:

- What are the challenges the County is currently facing?
- Current Water Supply Situation
  - Interbasin Transfers and Water Supply
  - ❖ Additional Water Capacity Requirements that will be needed
  - Current Recommended Plans
- Current Wastewater Treatment System
  - **❖** System Configuration
  - ❖ Needs for Additional Wastewater Treatment Plant Capacity
- Recommended Actions needed from the Board
- Review of Preliminary Capital Improvement Plan (CIP)

Mr. Goscicki stated that the challenge is with only nominal growth in the County's water and sewer customer base, additional water and wastewater capacity will be needed within the next five to ten years.

He stated that Interbasin Transfers control the County's water supply program. He stated that one-third of Union County lies in the Catawba Basin and about two-thirds of the County is physically located within the Yadkin-Bee Dee Basin.

Mr. Goscicki noted that the County's current water demand in the Yadkin Basin is 7.5 million gallons per day. He stated that in order to meet that demand, approximately 5.6 million gallons per day of water are brought from the Catawba River Basin and 1.9 million gallons per day of water are brought from Anson County. He said that in order to keep below the five million gallons per day maximum net transfer number, approximately one million gallons per day of wastewater are returned into the Twelve-Mile Creek, which is in the Catawba Basin.

He addressed the County's eastern area water supply plans and the amount of available water. Mr. Goscicki shared that the County has an agreement dated 1992 with Anson County that expires in 2014. He said that agreement provides up to four million gallons per day of water supply; however, the County's current use is approximately 1.9 million gallons per day due to physical limitations of the system. He said that currently improvements are underway (bids were received last week) to that system that would allow Union County to utilize the full four million gallons per day. He stated that the bids came in very competitively priced. Mr. Greene interjected that the bids were in the range of five million dollars and the improvements were estimated at ten million dollars.

Mr. Greene reiterated that the current agreement with Anson County expires in 2014, and there have been discussions with Anson County regarding revisions to the current agreement that would provide for up to six million gallons per day of water to be sold to Union County. He stated that the staff is reluctant to place the bids for the transmission line on the agenda for award until there has been a little more progress on the agreement. He said that Anson County understands that Union County wants to move forward fairly quickly with an agreement, and a great deal of work has been done toward developing the agreement. He stated that the agreement is currently being reviewed by the Manager for Anson County and has not been presented to the Anson County Board of Commissioners or to the Union County Board of Commissioners. Mr. Greene said that staff is awaiting comments from Anson County and hopefully over the next two months, there will either be an extension to the current agreement or a final agreement that will give the Board a comfort level in awarding the bids for the Anson improvements. He stated that the bids are valid for 90 days.

Chairman Openshaw asked the amount that is being discussed as the minimum purchase of gallons of water per day by Union County from Anson County. Mr. Crook responded that staff has proposed 45 million gallons per month.

Mr. Goscicki said that once the improvements are in place, the staff wants to use the full four million gallons per day. He pointed out that at the present time the only areas served with water from Anson County are the Wingate and Marshville areas. He

said that by completing the improvements, the service boundary can be pushed from that area to include a good portion of the northern Union County. He stated that with the infrastructure, the ability to push more water into the northern portion of the County and to use more water from the Yadkin Basin within the Yadkin Basin will require the County to push less water from the Catawba Basin into the Yadkin Basin. He said that completion of the improvements is projected around December of 2010 and includes two big booster pump stations and 36,000 linear feet of pipe. He said there have been some very preliminary conversations with Anson County about possibly increasing the future allocation from four million gallons per day to maybe six million gallons per day.

In response to a question by Commissioner Baucom, Mr. Goscicki stated that Monroe has not been included in the enhanced service area. Mr. Goscicki said that at this point, the focus has been on the County's customers, service boundaries, and needs. He said that as the County moves forward on some of the solutions, one of the big issues is regionalization of some of the water and wastewater solutions and whether or not to bring partners to the table. He said that the focus of today's presentation is Union County's needs. He stressed that capacity is needed to satisfy the County's customers. He said that if those needs are satisfied, he thought as moving forward, there could be discussions about the County's partnering and whether or not it makes economic and environmental sense to bring partners to the table.

Commissioner Baucom asked about the contract for additional water for Monroe. Mr. Greene responded that would be in 2014 – two million gallons per day and that is envisioned to come from the Catawba River Basin.

Mr. Goscicki presented a graph showing that the County's capacity from Anson County is currently 1.9 million gallons per day. He said that when the improvements are in place, the capacity will increase to approximately four million gallons per day. He stated that the maximum capacity of water that can be brought from the Catawba River Basin into the Yadkin Basin is approximately six million gallons per day because there is approximately one million gallons per day of wastewater coming back, which allows it to remain at approximately five million gallons per day coming from the Catawba River Basin.

He reviewed the projected water demand using a 3.5 percent growth rate over the current flow demands within the Yadkin Pee Dee Basin. He explained that these numbers had been calculated by review of the County's billing records over the last year with a 1.6 million gallons per day peaking factor on the average demand. However, he said it is recognized that the 1.6 million gallons per day is not the high peaking factor. He stated that the 1.6 million gallons per day indicates that the County will continue to aggressively control its demands through water conservation and demand practices. He said they used actual flows and projected

them to the arbitrary 3.5 percent growth, which equals about 1,200 to 1,400 customers per year at the current level. He stated that this figure was probably somewhat aggressive for this year but is very conservative compared to where the County was three to four years ago. He said that it is a number used for illustrative purposes.

Mr. Goscicki stated that this number shows that by 2020 the County will have exceeded its capacity. He said that somewhere in the 2015 to 2020 timeframe, the County needs to have an additional eastern water supply capacity on line. He said that applying a five percent rate of growth, the County would require additional eastern water capacity much sooner. He said that in order to meet that type of growth, increasing the initial two million gallons per day of water from Anson to four million gallons per day would need to be online within the next year or so and would need to have a plant on line probably by 2015 even with the increased capacity.

Mr. Goscicki reviewed the eastern water supply options that have been considered:

- 1. Expand the Anson Water Treatment Plant and convey potable water to Union County;
- 2. Convey raw water from Blewitt Falls and construct a new wastewater treatment plant in northern Union County; and
- 3. Convey raw water from Blewitt Falls and construct a new wastewater treatment plan in western Anson County.

He stated that the recommended alternative was a combination of Options 2 and 3. He stated that in terms of the current recommendation to the Board, it is to build a new water intake at Blewitt Falls, and to build a treatment plant somewhere either in Anson County or in northern Union County. He said that staff is at a halt at this time on the planning.

Mr. Greene stated that there is only one action regarding utilities that staff would like for the Board to consider today. He said that staff wants to review the County's Capital Improvement Plan (CIP) and to receive the Board's input on the CIP. He said the requested action by the Board would be the acceptance of a recommendation on an ultimate long-term water supply from the Yadkin River Basin. He stated that it is important that the County move forward with its planning. He said that in considering the costs of the treatment facilities, it becomes clear that partners are needed. He noted that a long-term supply from the Yadkin Pee Dee River Basin will be an extremely expensive proposition, and much of the improvements would be constructed outside of the County's boundaries. He said that this indicates that partnerships are absolutely needed with Anson County and in terms of the economies of scale and keeping the costs down, other partners also need to be pursued such as the City of Monroe. He said not only does the County need to move forward with more planning at this time on an alternative but also on acquiring potential partners.

Mr. Greene said that, obviously, that direction will shift over time. He stated that there are probably dozens of decisions that the Board will have to make over the next ten years before an eastern water supply is realized, and each one of those decisions could shift the focus or alter the plan somewhat. He noted that the end result in ten years may not be the same as what is being discussed today. He said that the location of the supply on the Yadkin River could change, where the treatment facility is built could change, and the mix of partners will evolve over time. He emphasized that the planning process needs to begin, and the one action that staff would ask the Board to consider is accepting the recommendation on the eastern supply so that it can begin the planning.

Chairman Openshaw responded that the Board would not take action today. He said that Vice Chair Rogers was unable to attend the meeting today, and he wanted to make sure all the members would be here today. He stated that when Vice Chair Rogers is brought up to speed on the presentation, then the Board would make this decision.

Mr. Greene stated that the Chairman had asked him to speak with Vice Chair Rogers, which he did, and he explained that to her and she was aware that this information would be presented today.

Mr. Goscicki said that as had been pointed out by the Manager, the big constraint in the schedule which makes it a ten year plan now rather than what would have been ten years ago a five to six year program is the permitting, the interbasin transfer certifications, the environmental permitting, etc. He said that worse case scenario would be four years on receiving the interbasin transfer certification. He reiterated that staff needs to move forward with the preliminary design and permitting so hopefully within three to four years the design can move forward. He said that if the planning starts today, it would be January 2019 when it would actually be operational with a new water treatment plant. He stressed that the projections are that in 2018 the County would run out of water using 3.5 percent growth.

Mr. Greene asked the Board if there were questions regarding the eastern water supply.

Chairman Openshaw said that he had three statements. The first of which was that Anson cannot afford to proceed on its own. He said that without a firm plan of how to allocate the additional water, which he thought should be done through the water allocation policy, it is putting the County back into another failed cycle like it just went through where the existing residents of Union County

have been bearing the costs of growth for the ones who have profited from it. He said a system needs to be identified that is going to pay for it not on the backs of the existing residents.

Mr. Greene said that he disagreed with the Chairman's comments and until an alternative is accepted from a planning perspective, and the staff is authorized to move forward, those questions will never be answered. He said that the County is at square one and staff cannot continue to pursue planning unless the Board considers accepting an alternative and allowing the staff to move ahead for the planning of that alternative.

Chairman Openshaw stated that he had given the staff several things to plan for. He said that one issue that needs to be discussed is how to allocate the water. He stated that clearly there is not enough water. He said that at five o'clock this morning he had compiled a number of questions and tried to put the numbers together of where the County currently stands, and the proposed status as to where it will be in five years. He stated that one of the things that became clear is that water is an issue, but part of the problem is that the Board is looking to move forward with the water allocation policy with no parameters. He said that he did not believe the numbers that the Board was given the other day are real, and he did not believe that there is 2.4 million gallons per day to allocate. Also, he said that he was unsure whether he believed the peaking factor of 1.6 million gallons per day. He said if that is the case, then he assumed that the County had less water than was presented. He stressed that the County needs to plan and reclaimed water should be a part of that plan.

He said that a determination needs to be made about who gets the water and why. He said that there needs to be a plan developed to show how the water is to be allocated, and it needs to show how to receive the allocation and the plan needs to be visible to everyone. He said the other aspect is before the County starts spending money, there needs to be a determination of how to pay for the improvements. He stated that this is something that the County did not do in the past. He said that in addition to having a plan to allocate the water, there needs to be a decision about how much to reserve for economic opportunities, government facilities, and schools and then how to pay for the improvements.

Chairman Openshaw said that he wanted the County to lock in some partners before incurring the costs. Mr. Greene explained that the staff was only asking that the Board consider the recommendations for the long-term water supply and accept a concept on an approach for moving forward so that staff can begin to answer the questions of who the partners will be, what the costs will be, etc. He said that the water would be going to new customers that are not here yet. He stated that staff cannot work to

arrange partners if there is not a concept that the Board has accepted as to how to get the water to Union County and to the other partners. He said that the recommendation is a very broad planning concept at this point. He suggested that if the Blewitt Falls concept is not one the Board can accept, then perhaps it should look at one of the other options.

Mr. Goscicki said that one of the recommendations that would be presented at the end of the presentation is the absolute need to move forward with a fiscal plan to determine how to pay for the improvements. He said that a plan needs to be established that looks at how new development pays for its proportionate share, etc. He stated that these are major policy issues that need to come back to the Board as the program moves forward. He said that what also needs to be considered is that Union County is going to run out of water to meet projected future demands in a relatively short timeframe. He stated that the concept that staff has presented is that the County needs to move forward and provide leadership to the rest of the area in terms of Monroe, Anson and others, who might want to participate. He said he thought they were looking for someone to take the lead and move the program forward in the planning and permitting side, which does not involve the big dollars. He stated that he thought it was recognized that the County cannot go out and spend a hundred million dollars without knowing how to pay for it, but the process needs to move forward with the eastern water supply plan so the partners can be established and permits obtained. He said that the Chairman had made excellent points and without partners, the projects become very expensive.

Chairman Openshaw stated that he understood the process but what he did not understand is why everyone thinks that the existing residents should bear the burden of the projects when he has seen nothing that shows him that the way the County develops and grows now does not come at a significant costs to the existing residents. He explained that is why he needs to see a plan that shows how the costs will be borne by the people who profit from it and not by the people who will see no increase in their level of service. He said that the County needs to tighten its system. He said that there are inflow and infiltration issues in Crooked Creek, and he does not know what the loss number is to the water system. He stated that Wingate and Marshville say they want more water and sewer, but they have leaky pipes as well and the County needs to work with these municipalities as well. He said the bottom line is where the costs come from.

Mr. Goscicki responded that staff agreed and part of the planning process would be for staff to put the fiscal plan together and come back to the Board with the cost for expansion, costs for possible retrofitting, what capacity fees should be for water and sewer, etc.

Mr. Goscicki then reviewed the western water supply. He said that currently a good portion of the eastern part of the County is being served with western water. He said that currently the Catawba River Water Treatment Plant is at 36 million gallons per day capacity, and the County has a 50 percent equity share in the plant capacity of 18 million gallons of water per day. He stated that the system has a total permitted water withdrawal of 100 million gallons per day potential, so there is potential for future expansions of the plant to meet growth needs in the area. He said that there is a planned expansion currently under design that will essentially double the capacity of the treatment plant and provide the County with an additional nine million gallons per day of water.

There was discussion regarding the interbasin transfer issues in connection with the Catawba River.

Mr. Goscicki said that Union County is in negotiations to lease an additional two million gallons per day capacity short-term from Lancaster. He explained that the projected demands in the Catawba Basin were developed in the same manner as the Yadkin demand.

Chairman Openshaw asked why the presentation still shows five million gallons as an interbasin transfer when every report discusses taking this water to replace the interbasin transfer. Mr. Goscicki responded the reason that it is being shown is because that is the current condition. He said there is no eastern water treatment plant and, if a plant is built, then the plant can be sized to reduce that amount. He said depending on the size of the eastern water treatment plant, less water would need to be put into the Yadkin Basin.

Mr. Goscicki said that until an eastern water treatment plant is built, then the maximum amount should be put in for interbasin transfer to meet the needs. Chairman Openshaw asked if there were not an interbasin transfer permit, would the needs of the Catawba Basin be served by the current plan. Mr. Goscicki responded that even at five percent growth, it would be good to probably 2030 but at 3.5 percent growth, it would be good for long-term. He said that because the Catawba water is less expensive than the Yadkin water, the County would want to optimize the Catawba water as economically as possible within the permit windows. Chairman Openshaw said that was a paradigm shift from what has been presented in the past. He said that every report that the Board has received states that it will essentially be minimizing the interbasin transfer. He said that now it was looking at a different scenario.

Mr. Goscicki said there is a maximum amount of water that can be sent to the Yadkin Basin and stay within the five million gallons per day interbasin transfer and that issue is reflected in the presentation. He said that the Board needs to look at the

economics and permitting. He stated that what is clearly shown is that more water is needed in the eastern water supply area. He said that depending on what happens with the interbasin transfer, the eastern water may be more rather than less, and if it is more, it would probably mean that the Catawba River Treatment Plant would have to be expanded past the 27 million gallons per day for another 20 years or so.

Mr. D'Adamo asked if the presentation were also based on a 1.6 million gallons per day peaking factor. Mr. Goscicki stated this was correct. He reviewed the priorities in 2009 regarding water:

- Finalize water allocation policy parameters
- Approve concept plan for eastern water supply plant
- Move forward aggressively with the eastern water supply in terms of
  - o Partnerships/agreements
  - o Predesign and permitting
  - o Financial feasibility analysis
- Begin update of integrated water, wastewaster, and reuse master plan
- Maintan schedule of the Catawba River Water Treatment Plant expansion project
- Complete contract negotiations with Anson County
- Begin construction of short-term Anson capacity increase

Commissioner Kuehler asked what the peaking factor has been over the past couple of weeks. Mr. Goscicki responded that there had been flows over 15.6 million gallons per day which the peaking factor would be about 1.79 million gallons per day.

Mr. Goscicki stated that the 2.4 million gallons per day is based on one-day per week irrigation over a seven-day period and enforcement of the irrigation schedule would need to be done. Chairman Openshaw noted that there was no history on the seven-day period. He said that another factor that would need to be worked into the water allocation policy would be when to shut off irrigation. He stated that his thinking is if it touches 18 million gallons per day, irrigation would be shut off, or if going to two-day per week irrigation to one-day per week irrigation. He said that it would need to be shut off while there is still projected room to breathe. He stated that he did not believe the numbers were correct as they are constantly changing. He says that it seems to him that assumptions are being made that many of the projects are not going to be constructed in a relatively short period of time, but the

projections are assuming a 3.5 percent growth. Chairman Openshaw said that his position is that one-day per week irrigation is a fall back position and not that it would go to one-day per week and still issue permits.

## **Wastewater Program Needs:**

Mr. Goscicki stated that currently Union County's wastewater services are spread out over four major drainage basins: 1) Twelve-Mile Creek Drainage Basin; 2) Six-Mile Creek Drainage Basin that goes to Charlotte-Mecklenburg Utilities (CMUD) McAlpine Creek Facility; 3) Crooked Creek Drainage Basin and Grassy Branch which is part of the Crooked Creek with a separate facility; and 4) Monroe/Richardson Creek which is served by the City of Monroe's wastewater treatment plant and discharges out to Crooked Creek. He stated that a diversion project is currently under design that will allow interconnect flows from Twelve-Mile Creek to Six-Mile Creek.

He stated that the Monroe Wastewater Treatment Plant essentially serves the County's customers in the Marshville/Wingate area. Mr. Goscicki noted that in the master plan a new north area wastewater treatment plant is proposed that would pick up most of the growth within Crooked Creek and in the eastern part of the county beyond the current 2.65 million gallons per day capacity with the City of Monroe. He explained the reason for the proposed location of the new north area wastewater treatment plant is because of the natural drainage.

**Twelve-Mile Creek/Six-Mile Creek Basin.** Mr. Goscicki stated that currently there are three million gallons per day of permitted capacity with CMUD and six million gallons per day of current capacity in Twelve-Mile Creek for a total capacity of nine million gallons per day. He said that projecting 3.5 percent growth in 2020, a new expansion of Twelve-Mile Creek Wastewater Treatment Plant needs to be completed.

Commissioner Mills asked what was being diverted from Crooked Creek to Twelve-Mile Creek. Scott Huneycutt responded that this was the Poplin Road project which is approximately one million gallons per day.

There was discussion regarding the completion date for the diversion project which was estimated to be within a year to a year and a half. Commissioner Mills questioned the current capacity in the Twelve-Mile Creek Wastewater Treatment Plant. Mr. Goscicki responded that he thought the actual peak flow was 4.5 million gallons per day.

Commissioner Baucom referred to the proposed new north area wastewater treatment plant. He said that he thought the location of that plant had been moved downstream to the eastern end of the County in the master plan. Scott Huneycutt of the Public Works Department replied that the 2005 master plan was approved without any northern wastewater treatment plant. Mr. Goscicki stated that the new north area treatment plant was included in the master plan document presented to the Board in 2006, and the Board accepted the master plan with the exception of the northern wastewater treatment plant.

Twelve Mile Creek Basin Continued: Mr. Goscicki said the County would reach the 9 million gallons per day capacity (six million gallons per day at Twelve-Mile Creek and three million gallons per day from CMUD) in 2020. He stated that it is time to begin moving to have an expansion of the Twelve-Mile Creek facility on line. He said that there are issues regarding whether or not the plant can be expanded, and he stated that was the reason the County needs to move forward with the preliminary design and permitting of the expansion. He stated that the permitting issues could either delay or derail the ability to expand the plant and in which case, the County would need to consider other options.

Commissioner Kuehler asked if there is a possibility of increasing capacity at the Twelve-Mile Creek Wastewater Treatment Plant. She said that she was under the impression that the plant could not be expanded. Mr. Goscicki responded that there was one correspondence from the State that says they have concerns about the water quality in Twelve-Mile Creek, and unless it can be demonstrated that this data is not correct or could be mitigated in some way, the Twelve-Mile Creek Plant cannot be expanded.

Chairman Openshaw said that he thought he had read that Lancaster County already treats 20,000 gallons per day of Union County's wastewater. He asked where Edenmore Subdivision sends its sewage. Mark Tye of the Public Works Department said that the 20,000 gallons per day serves Firethorne Subdivision. Mr. Tye offered to follow-up on the Chairman's question.

The Chairman stated that there was a 78-acre commercial parcel approved for development by the County. He questioned where the wastewater flow was being treated. Mark Tye stated that GS Carolina has had some conversations with South Carolina to serve some of its properties. He said that there is a wastewater treatment plant in Indian Land that discharges to the Catawba River so the flow from Firethorne Subdivision is contributing flow to that facility. He stated that Union County Public Works does not approve the plans or specs for anything across the County line.

Mr. Goscicki stated that the bottom line in regards to the Twelve-Mile Creek Wastewater Treatment Plant is the County is looking at the need for an expansion in 2018 to 2020 to have new capacity online either at that facility or in some other facility.

Eastern Side of County: Currently Served by the City of Monroe: Mr. Goscicki said that the projections reflected growth of five percent in this area. He stated that the wastewater master plan had anticipated significantly more growth because it assumed that the Highway 74 bypass would be completed. He said the master plan numbers had also been used for the Legacy Development. He stated that if the Legacy Development moves forward, it could contribute as much as 1 million to 1.2 million gallons per day of wastewater flow. He said that there is a significant potential for growth in that area with the Highway 74 bypass and the Legacy Development. Mr. Goscicki stated that with the current flows and using five percent growth, additional capacity will be needed around 2020. He said the permitted capacity is 2.65 million gallons per day with the ability to bring only 1.9 million gallons per day. He stated that physical improvements are needed to the County's infrastructure to be able to move more wastewater. He explained that there is need for some additional wastewater capacity from the City of Monroe just to serve the eastern portion of the County.

He stated that it was assumed that the flow from Poplin Road area would go to the proposed northern treatment plant. He said the Crooked Creek Treatment Plant would remain on line for the rest of its useful life but the plant would not be rehabilitated or expanded in the future. He said that the Grassy Branch plant would be taken offline at sometime in the future, and all of that flow would go to a proposed northern plant. He said it was all within the Yadkin Basin. He stated that another option that is under consideration is to pump the flow to the City of Monroe's plant. He said that in the future, maybe another four million gallons of capacity would be needed to serve the northern part of the County. Mr. Goscicki reminded that just for the eastern part of the County more capacity than the 2.65 million gallons per day is needed.

Commissioner Baucom asked about the status of the City of Monroe and the cooperative expansion of its plant. Mr. Greene responded that the Board of Commissioners has a joint meeting scheduled with the City of Monroe on Tuesday, July 21, 2009. He reported that the staff has met with the City's staff on several occasions in recent months. He said that with the downturn in the economy, he did not think the City of Monroe viewed the plant expansion as being as urgent as it was the same time last year. He stated that his understanding from his most recent conversations with the City's staff, the City of Monroe is looking for an expression from Union County of its desire and possible commitment to move forward in general terms with the City in pursuing additional water and wastewater capacity.

Mr. Goscicki stated that the numbers show that within the current area served in the Marshville and Wingate area, additional capacity could be used. He said if the area to be served is going to remain just in that area, the capacity could increase to four or five million gallons per day. Further, he said that anticipating the growth from the 74 Bypass from the Legacy Development, if that occurs, as much as an additional five million gallons per day could be needed in the future. He said that it is not known if moving forward with partnering with the City is the most cost-effective option. He said what he thought was known at this time is, yes, the County wants to participate with Monroe and could use additional capacity of at least two to four million gallons per day and more capacity may be needed depending on what is done in the north end of the county.

Commissioner Baucom stated that he thought when it was discussed a year ago with the City of Monroe, the expansion in conjunction with Monroe was the most feasible and most economically viable option. Mr. Goscicki responded that he did not think there were any pre-engineering predesign reports or updated plan that indicates that this has been reviewed and it is the way to go.

Commissioner Baucom said that he was under the impression that because of land acquisition, permitting, and economies of scale, there was synergism that allowed the cooperative effort with Monroe to be more economically viable.

Mr. D'Adamo stated that Hazen and Sawyer completed a study to evaluate the feasibility of expanding the Monroe plant in conjunction with partnering with Union County. He said that in his recollection there was not a comparative analysis to the north Union County plant and all the conveyance that would be associated with it.

Mr. Goscicki said that he thought that Monroe had proven to itself that it makes a lot of economic sense for it to have partners. He stated that if it could bring partners on board, the incremental costs would be less.

Ms. Kennedy with CDM stated that for the east side of the County it would be economically feasible; it is the rest of the system that has not been evaluated, and it might not be as feasible.

Mr. Greene stated that for the short-term for eastern Union County, the expansion with Monroe makes sense, but beyond that, he thought the staff would like to pursue a study of a more long-term approach to wastewater in the Yadkin Basin through the water and sewer master plan.

Commissioner Baucom said that he was under the impression that Crooked Creek was off the table because of environmental factors. Mr. Goscicki responded that there had been a number of studies on a north wastewater treatment plant dating back to 1997. He said that Commissioner Baucom was correct that the original site was not feasible because of environmental reasons.

Mr. Goscicki said that the last study he had seen was from December 2006 and that placed the treatment plant in the area identified in the master plan. There was continued discussion regarding the number of options for locating a treatment plant, which were considered at the direction of the Board.

Mr. D'Adamo commented in regards to whether a treatment plant is constructed in northern Union County or if the County partners with the City of Monroe, there is an interbasin transfer element. He said if the County proceeded with the northern Union County water supply, the Department of Environment and Natural Resources is contemplating a four million gallons per day grandfathered interbasin transfer from the Yadkin to the Rocky River Basin. He stated that the water and wastewater should still go hand-in-hand. He said that the wastewater could be sent to Monroe or to a north Union plant or other location in the Rocky River Basin.

Mr. Goscicki reviewed the County's wastewater priorities as follows:

- Proceed with the permitting and conceptual design of a possible 12-Mile Creek Wastewater Treatment Plant Expansion or alternative.
- Continue negotiations with the City of Monroe for additional wastewater treatment capacity
- Resolve the best solutions for meeting long-term wastewater service needs in the Crooked Creek Basin (whether to build a four or five million gallons per day wastewater treatment plant in northern Union County or to build a pump station and force main and purchase additional capacity from Monroe)

Commissioner Mills asked about the limits of allowable discharge in Richardson Creek. Mr. Tye responded that speculative limits were not requested for Richardson Creek but speculative limits were received for Rocky River. He said that he thought it was important to note that the report by Hazen and Sawyer suggests that the effluent might have to be pumped all the way to the Rocky River.

Commissioner Kuehler asked about the speculative limits for Twelve Mile. Mr. Tye responded that some time ago, speculative limits of 12 to 15 million gallons per day were identified.

Mr. Goscicki reviewed the proposed next steps:

- Authorize staff to proceed with conceptual plans and environmental permitting for the selected Eastern water treatment plant alternative
- Authorize staff to proceed with permitting and conceptual design for a possible 12-Mile Creek Wastewater Treatment Plant expansion
- Proceed with Water and Wastewater Master Plan update (in process of finalizing Request for Proposals [RFP])
- Continue negotiations with Anson County for extension and expansion of Water Capacity agreement
- Continue negotiations with the City of Monroe for additional wastewater capacity
- Develop a fiscal plan for implementation of all the master plan recommendations

Commissioner Mills questioned how soon staff was looking for direction from the Board regarding the next steps. Mr. Goscicki stated the most critical challenge from looking at the numbers is the eastern water treatment plant. He said that the County was behind schedule in terms of getting a new plant on board to meet the County's needs. He stated that this needs to move forward aggressively with the permitting and conceptual design. Mr. Goscicki estimated it to be a four-year permitting and planning process. He said that there needs to be some level of engineering around what the County's needs would be and what potential partners' needs might be to be able to bring it forward as a permit. He explained that while bringing the permit forward, parallel to that would be

meeting with potential partners saying that the County is moving forward with a treatment plant and inviting partners to join the County. He said that during the four-year window for permitting, the size of the facility would be determined, the location of the facility, and who the partners would be. He stated that there was not a need to lock down all of the partners up front and then begin the permitting, as this could add another year or so to the process.

Commissioner Baucom asked if Mr. Goscicki or Mr. Greene has had conversations with potential partners for the plant. Mr. Goscicki responded that he has had conversations with representatives of the City of Monroe, and Monroe is very interested at the staff level of partnering with the County on water. Mr. Greene said that there had been meetings of the Yadkin Group, and Anson, Monroe and others are potential partners.

Commissioner Baucom said that those who have really expressed a definitive desire to be at the table was Anson, Stanly, Cabarrus, Charlotte-Mecklenburg, and Monroe. He stated that there was no question in his mind that they wanted to be engaged and involved. He asked if it would be prudent to meet with those entities to get some determination of the numbers they would be looking for and the level of engagement/involvement they would be entertaining before looking at sizing or locating a facility or determining whether it be raw or potable or semi-potable.

Mr. Goscick responded that much of this has been done. He said that there have been a number of studies completed looking at water supply alternatives. He stated that the alternative currently on the table still includes those partners as viable entities.

Mr. D'Adamo said that they were not party to those decisions, but he knew there had been discussions with potential partners. He stated that the hard numbers that were obtained were 10 million gallons per day for Monroe and five million gallons per day from Lancaster. He said that he did not think any of the other potential partners had expressed a hard number but it was more an expressed interest.

Mr. Goscicki said this is why it is thought the County needs to move forward with this project, because there are a couple of partners who have provided numbers for their needs and have expressed an interest. He expressed concern, as the County's new Public Works Director, that he has looked at the numbers and in seven to eight years from now, the County could be in real trouble in terms of water supply. He said that regardless of whether Cabarrus County or Charlotte-Mecklenburg joins or does not join, it will

not change the County's situation that it will be out of water in eight years. He stated that no one was being excluded as a partner at this point.

Mr. Greene added that staff wants the focus of the discussions to be on an alternative that is workable for Union County. Chairman Openshaw said that Commissioner Baucom's plan which he discussed is exactly how he also feels. Mr. Goscicki said that the latest numbers that were on the table at the last design were a total of 56 million gallons per day. He said that Union County's need was about half of the plant going forward. Chairman Openshaw said that was the part that needed some massaging, because it is not known how much water will be allowed to be extracted from the Yadkin River.

Commissioner Baucom said that he thought Union County should be the lead in any efforts. He stated that the first and foremost priority that he has and that he thought the Board had is to procure long-term water for Union County. He said that if it could be done in a more economically viable manner, then it should certainly be considered. He stated that economically viable takes many different directions whether it is raw cents per gallon, time lines, or cost of operation long term.

Commissioner Baucom moved to authorize staff to proceed with conceptual plans to determine an eastern water treatment plant.

Commissioner Mills asked why not have the same motion for the possible conceptual design for Twelve-Mile Creek.

Commissioner Baucom stated that he agreed with Commissioner Mills' suggestion and would accept that as a friendly amendment to his motion.

Mr. Greene said that he would presume that the motion would be predicated on any expenditure in connection with the motion over \$20,000 would require that it be brought to the Board for approval. Commissioner Baucom agreed. However, he stressed that he wanted to be very clear that he expected absolute concerted efforts with potential partners in all areas, because collaborative efforts can lead to a lot of potential synergism that is not only economically viable but also there is nothing wrong in just being good neighbors.

Chairman Openshaw said that he was fine in discussing these matters in further detail when Vice Chair Rogers was able to attend. He asked if there was further discussion on the motion.

Commissioner Kuehler said that she needed time to look at the information that has been presented today. She noted that the Board has an upcoming meeting with Monroe, and she would like to hear what they have to say.

Following discussion, the motion failed by a vote of two to two. Commissioner Baucom and Commissioner Mills voted in favor of the motion. Chairman Openshaw and Commissioner Kuehler voted against the motion. [Vice Chair Rogers was not present.]

At approximately 11:05 a.m., Chairman Openshaw called for a short recess at the request of Commissioner Kuehler.

The meeting was reconvened at 11:15 a.m.

Kai Nelson, Finance Director, presented the Board with preliminary estimates of what he described as a near-term water and sewer CIP. He said it was somewhat of a conceptual CIP where the numbers will change tomorrow where as clarity would continue to be provided through the master plan. He requested that Mr. Goscicki review some of the high profile projects contained on the CIP on both the water and sewer side.

## Mr. Goscicki reviewed the following projects:

- 1. Catawba Water Treatment Plant Expansion (new reservoir as well as plant capacity). He said that these projects are actually under design by Black and Veatch.
- 2. Anson Improvements Improvements being made to the pump station and to 36,000 feet of pipe that is being put into the ground so that Union County can receive its full four million gallons per day from Anson. He said that the numbers contained in the CIP are based on the bids.
- 3. Eastern Union County Water Supply \$100 million is rough estimate of the County's potential share of a 56 million gallon per day plant that is projected to be \$280 million plus. He said that the construction dollars for this project are all five years out, and the first four years are preliminary design and permitting numbers.
- 4. Weddington Elevated Storage Tank the amount for this project is increased to reflect the land prices

Chairman Openshaw asked the status of the Weddington Elevated Storage Tank. Mr. D'Adamo stated that they had met with the Town of Weddington to review the conditional use permit process and discussed some of the issues. He said they were in the process of putting together the plans and application to submit later in the summer.

Mr. Goscicki noted that the projects contained in the proposed CIP under the project estimates are continuing projects for which the Board is asked each year to continue budgeting money, and there is no project total such as the self-help program and miscellaneous waterline replacement projects. He stated that the Mineral Springs Pump Station and Elevated Tank is another big project of \$5 million and it would not be in construction until 2012 or 2013. He said that this project was based on the previous master plan.

He said that there are a number of other projects identified in the earlier master plan such as pressure issues needed to meet service demands.

Mr. Goscicki reviewed the sewer projects listed on the proposed CIP as follows:

- 1. East Union County Collection System Improvement He said that this number has been increased from previous budgets. He stated that this was done in recognition of the original project as planned to stay with the existing pump stations and upgrade those to take advantage of the 2.65 million gallons per day capacity. He said that based on the work that was done recently, it is recognized that the County would like to be able to take more than that amount to the Monroe plant based on Monroe's desire to sell the County additional wastewater capacity. He stated that they would be designing two new pump stations rather than upgrading the two existing pump stations because they are size limited, and, to accomplish that, the amount shown on the CIP has been increased.
- 2. Tallwood Wastewater Treatment Plant Mr. Goscicki said that this project has been programmed for some time to move forward with the refurbishment and replacement of that facility.
- 3. Twelve-Mile Creek Wastewater Treatment Plant Expansion He said that dollars have been included for this project recognizing that it might be this plant or some other alternative. He said that the start of those dollars are in 2012 or 2013 with the balance of the dollars for construction a year after.

- 4. Additional Capacity CMU System He said that as noted earlier, there is an agreement that provides up to three million gallons per day but to date, the County has only purchased one million gallons per day. He said there will be a cost to that additional two million gallons, but there have been no detailed discussions with CMU about how it would be configured, whether there would be an upfront capital payment, whether it be a debt service payment, or some other configuration.
- 5. 12 Mile Wastewater Treatment Plant Pump Station and Force Main to CMU (Diversion) Mr. Goscicki said that this project has been budgeted in the proposed CIP, but the County will be reimbursed close to 90 percent of the cost of the project.
- 6. City of Monroe Wastewater Treatment Plant Partnering He said that staff had tried to identify what they thought would be a number. He stated that the City is looking at a program to provide both the City of Monroe and the County with an additional five million gallons per day capacity. He said that negotiations would need to continue with the City of Monroe.
- 7. North Union Wastewater Treatment Capacity Mr. Goscicki said that the County's share of the capacity needed in this plant would be an additional 4 million gallons per day and could cost in the order of \$36 million.

Chairman Openshaw asked for more details regarding the Stormwater Infrastructure Mapping Project listed on the proposed CIP. Scott Huneycutt of the Public Works Department explained that this would be a new effort to begin the process of mapping for stormwater. He said that there is currently an ongoing contract for water mapping. Mr. Goscicki noted that this program would be tied in with the County's GIS system.

Mr. Goscicki pointed out that funding has also been included for the wastewater master plan update. He said there is a corresponding sum for the water master plan. He stated those numbers should be combined as a single effort to come up with an integrated wastewater and water master plan.

Mr. Nelson stated that the combined total of both water and sewer projects and on these particular projects from inception to date has been \$3.7 million. He said if the County were to continue with these projects in the order of magnitude, there would be a

little over \$13 million spent in year one (current year). He said that a number of these projects have a construction component with them and would be completed within the four year timeframe.

Chairman Openshaw said that one of the questions raised at the Board's last water allocation meeting was the ability to track the County's water and sewer. He stated that the study that was done which was as requested by the Public Works Advisory Committee included software for the Public Works Department costing in the millions of dollars. He said that he did not see any of those amounts in the proposed CIP except for \$25,000. He asked about the need and desirability of the software.

Mr. Goscicki responded that they were starting with a lower end approach such as the computerized maintenance management software. He explained that they had budgeted \$25,000. He said that a standalone desk top software would give the same functionality as a quarter of a million dollar system but it does not give the ability to integrate into the County's procurement and payroll system so those inputs would need to be manual. He said that the \$25,000 would get the County working with the data to learn what is or is not needed and maybe in a couple of years, it can be determined if it is worth upgrading to the more expensive system. He stated the same would be true with the permit tracking. He stated that staff has done a great job of developing a very detailed Excel spreadsheet. He said this has been developed on the sewer side and estimated that it was 56 percent complete on the water side.

Chairman Openshaw said that taking it back to early involvement, there has been no transparency in the past. He stated that people have been asking for this information to be put online. He stated that is what he wanted to see occur.

Mr. Greene said there is an in-house effort to connect various County departments.

Mr. Nelson discussed the sources of funding for the CIP. He said that the CIP is currently at \$114.5 million. He stated that the sources of funding would be the beginning balance of \$31 million and adding approximately \$12.8 from capital contributions from customers and developers, municipalities (\$3 million) and revenue debt issuance (\$67 million).

He emphasized that the CIP is highly preliminary in nature and represents a concept. He said that an important point he wanted to make was that in order for the Board to begin to deal with some of the significant policy decisions with regard to who pays, there needs to be a better understanding of the CIP costs. He stated that part of that is to run parallel the aspect of updating the

GIP are based on the current capacity structure, which needs to be updated. He stated that there were several things he wanted to say clearly. Sewer rate payers for the past 10 years at least have not seen a rate increase, and the sewer rate being charged today is the same sewer rate that was charged over 10 years ago. He said for water customers consuming six to ten thousand gallons per month, the rates that they are paying today are less than they paid 10 years ago. He emphasized that up to this point, the existing customers have actually enjoyed the benefit of customer growth, but now the County begins to have issues with capital infrastructure. He said that there are a lot of significant policy decisions on which the Board will have to direct staff before the details can be worked out of who pays. He cited the example of 10 million gallons of water at \$6.00 per gallon and \$60 million for water production alone. He stated his point in this is that the County will always have the dilemma of incurring capital costs upfront, creating capacity, and then the aspect of having to pay debt service upfront.

[Commissioner Mills left the meeting at 12:00 p.m.]

Mr. Nelson said that every year the cost operating the wastewater treatment plants increase. He stated that Union County has not had a comprehensive rate study to ensure that the current rate structure is sufficient to pay for water and sewer. He said that in terms of the next step, it is embarking on a financial plan relative to the CIP to determine how to pay for the CIP.

There was discussion on how debt is paid for in the enterprise fund.

Mr. Greene stated that staff would continue to flesh out the one to four-year capital plan and to get it to the point where it is ready for further review by the Board and ultimate approval. He said that in the meantime there would be decision points on many of these projects going forward that will be brought to the Board.

Mr. Greene said that the only other item on today's agenda is consideration of a Proclamation requested by Piedmont Natural Gas on Share the Warmth Day.

Commissioner Baucom expressed concern about the County endorsing the Proclamation of a commercial entity.

Mr. Greene explained the Share the Warmth Day Program. He said that 100 percent of the contributions goes to the low-income people, and Piedmont Natural Gas does not recoup administrative costs.

Commissioner Baucom questioned why other utility companies would not be encouraged to participate in this program.

Mr. Greene suggested that if the Board has a concern over the Proclamation, that it not adopt the proclamation. He said that he thought the program would go forward.

Commissioner Baucom said that he liked the program and his only concern is promoting a commercial entity. Commissioner Kuehler said that she tended to agree with Commissioner Baucom.

Chairman Openshaw said that the proclamation would die for lack of a motion.

Mr. Greene said that there was a revised memo for the Board regarding questions submitted on the Water Allocation Policy as well as a revised Policy.

With there being no further discussion, at approximately 12:04 p.m., Commissioner Baucom moved to adjourn the special meeting. The motion passed by a vote of four to zero. Chairman Openshaw, Commissioner Baucom, and Commissioner Kuehler voted in favor of the motion. Commissioner Mills left the meeting prior to adjournment without having been excused, and, therefore, his vote was counted in the affirmative. Vice Chair Rogers was not present.