

Lower Cape Fear Water & Sewer Authority
Long Range Planning Committee Meeting
April 10th, 2023

Chairman Blanchard called to order the Long-Range Planning Committee Meeting on April 10, 2023, at 8:30 a.m. The meeting was held at the Authority's office located at 1107 New Pointe Boulevard, Suite 17, Leland, North Carolina.

Roll Call by Chairman Blanchard:

Present: Norwood Blanchard, Patrick DeVane, Harry Knight, Al Leonard, Charlie Rivenbark, Frank Williams, and Rob Zapple

Present by Virtual Attendance: None

Absent: None

Staff: Tim H. Holloman, Executive Director; Tony Boahn P.E., McKim & Creed, Sam Shore, COG; and Danielle Hertzog, Financial Administration Assistant

Staff Virtual Attendance: Matthew Nichols, General Counsel

Guests Present: Director Wayne Edge, Glenn Walker, Brunswick County Water Resources Manager; Jordan Clark, Computer Warriors.

Guests Virtual Attendance: Kenny Keel, Pender County Public Utilities Director.

Presentation: Master Plan Review (Capital Improvement Plan) review by Tony Boahn

Tony Boahn presented the current draft Capital Improvement Plan (CIP) from 2023 through 2046, including Kings Bluff, Raw Water facilities, and Bladen Bluff water treatment facilities. The CIP had several factors including category of need, capacity issue, does it need to be replaced or rehabilitated, and is there a maintenance efficiency or redundancy issue. They assigned each project a criticality score as far as whether it's a high priority, low priority, also looked at no consequence if no action. There are three primary drivers: demand and capacity, life cycle, redundancy, and resiliency. The criticality is scored one, two, or three. One being the lowest and three being the highest need. The preliminary design memorandum is based on a demand table for projected usage from the different entities with a future demand of 96 million gallons per day in 2062.

Tony Boahn listed eleven projects for Kings Bluff and seven projects that are cost sharing projects. KB1 New 4th Pump at Kings Bluff has a criticality of three because current pumps will meet projected demands by 2035. The fourth pump will be standby/backup and add to pump rotation to reduce hours per pump. KB2 Rebuild high service pump motor. Rebuilding of the pumps will extend the service life of the pumps. KB3 New generators have a criticality of three due to the need to upgrade due to the future increased load associated with auxiliary pump motor HP and larger quantities pump. KB4 Pig 48" pipe from Kings Bluff pump station to 3 MG ground tank has a criticality of one because pigging will maintain a clean pipeline free of sediment, silt, and debris cleaned. It will also improve the efficiency of pumps by reducing the frictional characteristics of the pipeline. KB5 Pig future 54" pipe from 3MG ground tank to US 421 has a criticality of one sighting the same reason as pigging the 48" pipeline. KB6 Walkway and air backwash building replacement have a criticality of two because the walkway is in serviceable condition and will need to be replaced by 2024 due to rotting wood and overall weathering of the walkway. KB7 Replacing raw water pumps 1, 4 and 5 has a criticality of three due to age and mechanical wear. This project is more of a placeholder, and so we can budget and plan for replacement. The pumps have been in operation since 2009. KB8 New surge tank at Kings Bluff has a criticality of two because as the demand increases, surges in the system will likely increase, and this needs to be installed before the fifth pump comes online. KB9 5 ROW acquisitions rated a criticality of two. KB10 48-inch PCCP inspection and pig from the ground tank to US 421. KB11 48-inch PCCP repairs. KB10 and KB11 have been added this year.

The cost share projects now have CS, and the KB has been removed. CS1 Intermediate booster pump station shelter has a criticality of three due to needing to protect existing pumps, and equipment from elements. CS2 Intermediate booster pump station upgrade has a criticality of three because US 421 area demands will exceed current 29MGD capacity in approximately 2037. CS3 New fifth pump at Kings Bluff raw water pump station has a criticality of three because decreasing load and run times of existing pumps will extend the life and improve all pumps' reliability. CS4 20 MG ground tank has a criticality of two for increasing the available system storage and providing a more consistent supply for the safe and efficient operation of the adjacent interim booster pump station. CS5 7-mile 48-inch Parallel raw water main from the ground tank to US 421. CS6 3-Mile 48-inch parallel raw water main from US 421 to the Cape Fear Public Utilities vault. CS7 100MGD Reservoir has a criticality of one due to increasing availability system for water storage, allows for temporary redundancy of supply in the case of an emergency (line break, power outage, hurricane). Director Zapple wanted to know if the projected raw water demands have been updated since 2018. Mr. Boahn advised the chart was last updated in 2022. Director Zapple wanted to know where the 18 million needed to complete these projects would come from, Executive Director Holloman stated we would have to finance those projects. Director Leonard wanted to know if the cost estimate was in today's dollars or has inflationary cost be accounted for. Tony Boahn confirmed the cost was in today's dollars.

Motion: Director Rivenbark **MOVED**; seconded by Director DeVane, approval to present Master Planning Review to the full board. Upon voting, the **MOTION CARRIED UNANIMOUSLY**.

DIRECTOR'S COMMENTS AND/OR FUTURE AGENDA ITEMS

No comments.

FUTURE MEETINGS

TBD

ADJOURNMENT

There being no further business, Chairman Blanchard adjourned the meeting at 8:53 a.m.

Respectfully Submitted:



Patrick DeVane, Secretary