

Lower Cape Fear Water & Sewer Authority
Long Range Planning Committee Meeting
April 8th, 2024

Chairman Knight called to order the Long-Range Planning Committee Meeting on April 8, 2024, 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 Knight:

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; Matthew Nichols, General Counsel; Sam Boswell, COG; Tony Boahn P.E., McKim & Creed; and Danielle Hertzog, Financial Administration Assistant

Guests Present: Director Wayne Edge; Director Chris Smith; Director Scott Phillips; Glenn Walker, Brunswick County Water Resources Manager; Jorgen Holmberg, Computer Warriors; and Sean Kenyon, McKim & Creed Senior Project Engineer.

Guests Virtual Attendance: None

Presentation: Master Plan Review (Capital Improvement Plan) review by Sean Kenyon

Sean Kenyon presented the current draft Capital Improvement Plan (CIP) from 2024 through 2049, including Kings Bluff, Raw Water, and Bladen Bluffs water treatment facilities. The CIP had several factors, including category of need, capacity issue, whether it needs to be replaced or rehabilitated, and whether there is a maintenance efficiency or redundancy issue. They assigned each project a criticality score as to whether it was a high or low priority and looked at consequence if no action was taken. 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.

Sean Kenyon listed twelve projects for Kings Bluff and seven cost-sharing projects. KB1 New 4th Pump at Kings Bluff has a criticality of three because current pumps will meet projected demands by 2037. The fourth pump will be standby/backup and add to pump rotation to reduce hours per pump. KB2 Rebuild/Refurbish the existing 1600 HP vertical turbine raw water pump. Rebuilding the pumps will extend their service life. KB3 New generators have a criticality of two due to the need to upgrade due to the future increased load associated with auxiliary pump motor HP and larger quantities pump. The KB4 Pig 48" pipe from the Kings Bluff pump station to the 3 MG ground tank is critical because pigging will maintain a clean pipeline free of sediment, silt, and debris. 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 2025 due to rotting wood and the 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 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.

The KB10 48-inch PCCP inspection and pig from the ground tank to US 421, with a criticality of one, is a matter of utmost importance due to the current loss of capacity and/or clogging caused by

sediment buildup. Similarly, the KB11 48-inch PCCP repairs, also with a criticality of one, pose a significant risk of a pipeline break. The KB12 1.3 MW Solar Power Installation, a new project added this year, is a testament to our commitment to innovation and sustainability.

CS1 Intermediate booster pump station shelter and CS2 Intermediate booster pump station upgrade will drop off the CIP once CS5 and CS6 have been completed. They will be left on the report until CS5 and CS6 projects progress. CS3 The New fifth pump at Kings Bluff raw water pump station has a criticality of three because decreasing the 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 Parallel raw water main from 3MG ground tank to Pender vault has a criticality of one and is currently in process. CS6 3-Mile parallel raw water main from 3MG Pender Vault to Cape Fear Public Utilities vault has a criticality of one. CS7 100MGD Reservoir has a criticality of one due to the increasing availability of a system for water storage, allowing for temporary redundancy of supply in the case of an emergency (line break, power outage, hurricane)

Director Williams questioned if KB9 and KB10 should be cost share projected because of where they are located. Tony Boahn advised that KB9 is for the ROW of the 54-inch pipeline. After a discussion with the board members, it was realized that KB10 and KB11 are maintenance, not expansion, so Director Williams was fine with keeping the KB10 and KB11 LCFWASA project, not cost-shared. Director Williams would also like to know if the project will be maintained or expanded. Director DeVane is concerned about Bladen Bluffs's CIP amount. Executive Holloman advised LCFWASA that trust accounts for Bladen Bluffs GAC, Wells, SCADA, and Vehicle have been created. Mr. Holloman will discuss setting up a Trust CIP account with Buddy Harris at Smithfield Foods. Chairman Knight stated that the expansion of the Bladen Bluffs facility is likely to happen in the next decade due to population increases. Mr. Knight wanted to know what LCFWASA needs to do to start planning for that expansion. Executive Director Holloman advised LCFWASA that they will need to have some exploratory meetings internally and then with Bladen County Representatives.

Motion: Director Williams **MOVED**; seconded by Director Zapple, 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.

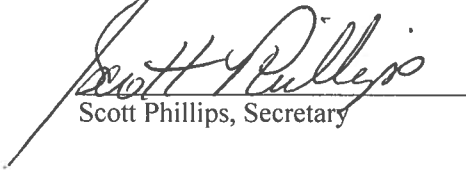
FUTURE MEETINGS

TBD

ADJOURNMENT

There being no further business, Chairman Knight adjourned the meeting at 8:59 a.m.

Respectfully Submitted:


Scott Phillips, Secretary