Lower Cape Fear Water & Sewer Authority Long Range Planning Committee Meeting February 10, 2025

Chairman DeVane called to order the Long-Range Planning Committee Meeting on February 10, 2025, at 9:46 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, Scott Phillips, Charlie Rivenbark, Phil

Tripp, Frank Williams, and Rob Zapple

Present by Virtual Attendance: None

Absent: Al Leonard

Staff: Tim H. Holloman, Executive Director; Matthew Nichols, General Counsel; Sam Boswell, COG; Tony Boahn P.E., McKim & Creed; Jess Powell P.E., McKim & Creed; and Danielle Hertzog, Financial Administration Assistant

Guests Present: Devon Moore, Computer Warriors; Anthony Colon, Pender County Utilities Director; Sean Kenyon, McKim & Creed Senior Project Engineer; Craig Wilson, Cape Fear Public Utility Authority Engineering Manager; Christopher "CJ" Cahoy, Garney Construction; Glenn Walker, Brunswick County Water Resources Manager; David Carson, Brunswick County Kings Bluff Water Resource Supervisor; Jason Cook P.E. HDR Inc.; and Brian Terry, Pender County Utilities Water & Sewer Superintendent

Guests Virtual Attendance: Heidi Cox, NC DEQ Regional Engineering Supervisor, Division of Water Infrastructure; Benjamin Kearns, Cape Fear Public Utility Authority Water Resources Manager, Water Treatment; John Nichols, Brunswick County Public Utilities Director; and Kevin Morris, Cape Fear Public Utility Authority Deputy Director

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

Sean Kenyon presented the current draft Capital Improvement Plan (CIP) from 2025 through 2050, including Kings Bluff, Raw Water, and Bladen Bluff 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 no 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 fourteen projects for Kings Bluff and three 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 Generators at King's Bluff Raw Water Pump Station have a criticality of two due to the need to upgrade because of future increased load associated with auxiliary pump motor HP and larger quantities being pumped. 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 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. 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 48" PCCP Leak Detection Project has a criticality of one because of potential leaks and weak points in the existing line before a break or failure. KB13 Surge Tank Control Panel Upgrades are critical because replacing the existing panels with a single panel and connecting to SCADA improves efficiency, minimizes required maintenance, and increases operational flexibility. KB14 Solar Power Study and Installation has a criticality of one. This will enhance the reliability and efficiency of the station by providing a redundant power source.

CS1 A 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. CS2 3-Mile parallel raw water main from 3MG Pender Vault to Cape Fear Public Utilities vault has one criticality. CS3 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 why KB1 was pushed out to FY 2028 and FY 2029. Executive Director Holloman stated that in FY 2023, at the Master Planning Document review, the partners requested to move from FY 2024, FY 2025, and FY 2026 to FY 2028 and FY 2029. Executive Director Holloman advised he will investigate debt services for the KB1 project. Director Williams suggested we could also investigate the partners paying for the KB1 project. Executive Director Holloman advised that he would research different payment options. However, LCFWASA must continue following the rate increase of 0.04 each year to cover these projects. Director William stated he agreed with the rate increase.

DIRECTOR'S COMMENTS AND/OR FUTURE AGENDA ITEMS

No comments.

FUTURE MEETINGS

TBD

ADJOURNMENT

There being no further business, Chairman DeVane adjourned the meeting at 10:52 a.m.

Respectfully Submitted:

Al Leonard, Secretary