

Lower Cape Fear Water & Sewer Authority

Long Range Committee Meeting Minutes

December 13, 2021

Chairman Leonard called to order the Long-Range Planning Committee Meeting on December 13, 2021, at 8:00 a.m. The meeting was held at the Authority's office located at 1107 New Pointe Boulevard, Suite 17, Leland, North Carolina.

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

Present Non-Board Members: John Nichols, Brunswick County Public Utilities Director; Ken Waldroup Cape Fear Public Utility Authority Executive Director

Present by Internet/Telephone: Kenny Keel, Pender County Public Utilities Director

Absent: None

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

Guest: Matt Hourihan, Cape Fear Public Utility Authority Assistant Operations Director; Tom Hendrick, Pender County Utilities; Sean Kenyon P.E., McKim & Creed

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

Sean Kenyon presented the current draft Capital Improvement Plan (CIP) from 2022 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 CIP 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 critically 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 sixteen projects for Kings Bluff. 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/Refurbish existing 1600 hp vertical turbine has a criticality of three due to water pumps originally installed in 2009 and mechanical wear. 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. Executive Director Tim Holloman advised the dates for the generators have been pushed due to the low hours currently on the generators. 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. John Nichols wanted to know since the last pigging of the 48" pipeline was from the pump station to the raw water tank, has any thought been given to pigging the pipeline section from the raw water main to the CFPUA vault. Sean advised additional infrastructure would be needed and, it is a matter that needs to be discussed. Tony Boahn advised that the last time an additional catcher was installed, the cost was around one million, including pigging of the line. Tony agreed this would be a good item to add to the CIP due to the current leak and one to two feet of sand found in the pipeline. Chairman Leonard wanted to know what sediment had been seen in the tanks. Tony Boahn advised the tanks haven't been cleaned out in a few years, but there was one foot of sand when it was completed. 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. The cost can be significantly increased if this project is completed during the wet season. Director Milliken wanted to know if the cost was composite or concrete materials. Sean Kenyon advised it is for a concrete material replacement. Tony Boahn advised he is discussing a design with the technical department regarding to move the backwash system to the bank. 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. They were each installed around the same time, so they might need to be replaced one after the other. 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. Director Blanchard feels we need to move this project up because the cost of land continues to increase. KB10 Walkway to access 48" raw water main at Livingston Creek has a criticality of one. The pipe and appurtenances at the aerial crossing are currently inaccessible to operations staff for routine inspection, maintenance, and repairs. KB11 Intermediate booster pump station shelter has a criticality of three due to needing to protect existing pumps, and equipment from elements. The shelter will also provide improved maintenance access during inclement weather. Director Blanchard and Rivenbark are concerned KB11 should be sooner because the booster pump station will need repaired/replaced sooner if left exposed. KB12 Intermediate booster pump station upgrade has a criticality of three because US 421 area demands will exceed current 29MGD capacity in approximately 2037. KB13 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. KB14 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. KB15 Parallel raw water main from 3 MG ground tank to US 421 service area has a criticality of one to provide additional system capacity. KB16 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 DeVane wanted to know if the reservoir would be lined, and Sean advised yes, the cost is with it being lined. Director Knight wanted to know if the budget is accounting for inflation. Sean stated the budget is in today's dollars.

Executive Director Tim Holloman advised this is just a draft CIP and would like to meet again in January, but this committee might have to meet outside of the formal board meeting.

DIRECTOR'S COMMENTS AND/OR FUTURE AGENDA ITEMS

No comments.

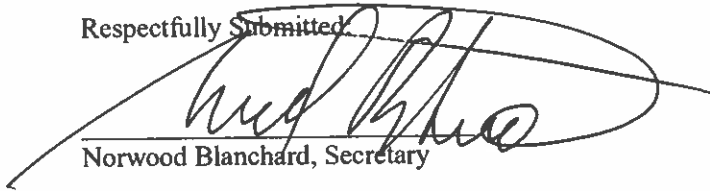
FUTURE MEETINGS

The next meeting will be before the January 10th Board meeting at 8:00 a.m.

ADJOURNMENT

There being no further business, Chairman Leonard adjourned the meeting at 8:52 a.m.

Respectfully Submitted,


Norwood Blanchard, Secretary