



## **AGENDA**

**Lower Cape Fear Water & Sewer Authority  
1107 New Pointe Boulevard, Suite # 17, Leland, North Carolina  
9:00 a.m. – Regular Monthly Board Meeting  
April 11, 2022**

**MEETING CALL TO ORDER:** Chairman Rivenbark

**INVOCATION**

**PLEDGE OF ALLEGIANCE**

### **APPROVAL OF CONSENT AGENDA**

- C1** - Minutes of March 14, 2022, Regular Board Meeting
- C2** - Minutes of March 14, 2022, Finance Meeting
- C3** - Minutes of February 14, 2022, Regular Board Meeting
- C4** - Kings Bluff Monthly Operations and Maintenance Report
- C5** - Bladen Bluffs Monthly Operations and Maintenance Reports
- C6** - Line-Item Adjustment for February 28, 2022
- C7** - Resolution Adopting the Lower Cape Fear Water & Sewer Authority's Local Water Supply Plan for, Kings Bluff Raw Water Pump Station, PWSID 50-09-013, for calendar year 2021
- C8** - Resolution Adopting the Lower Cape Fear Water & Sewer Authority's Local Water Supply Plan for, Bladen Bluff's Regional Surface Water System, PWSID 50-09-013, for calendar year 2021
- C9** - Resolution by Governing Body of Applicant for the 48" Parallel Raw Water Main Preliminary Engineering Report & Rate Study Project
- C10** - Resolution by Governing Body of Applicant for the Generators at King's Bluff Raw Water Pump Station Project

### **NEW BUSINESS**

- NB1** – Variable Frequency Drive, VFD critical spares parts for onsite stock, and revenue update
- NB2** – Budget Amendment #2 for the Variable Frequency Drive
- NB3** – Replacement of Mitsubishi 24k btu mini split wall mount at Kings Bluff Plant
- NB4** – Resolution Recognizing National Drinking Water Week

**ENGINEER'S COMMENTS**

**ATTORNEY COMMENTS**

## **EXECUTIVE DIRECTOR REPORT**

**EDR1**—Comments on Customers' Water Usage and Raw Water Revenue for Fiscal Year to Date  
Ending March 31, 2022

**EDR2**—Operating Budget Status, Ending February 28, 2022.

**EDR3**—Summary of Activities

## **CLOSED SESSION**

**CS1** – Closed Session in accordance with N.C.G.S. §143-318.11(a)(3) and (6) to preserve  
Authority's Attorney-Client Privilege and for Personnel Matters respectively.

## **DIRECTOR'S COMMENTS AND/OR FUTURE AGENDA ITEMS**

## **PUBLIC COMMENT**

## **ADJOURNMENT**

*The next board meeting of the Lower Cape Fear Water & Sewer Authority is scheduled for Monday, May 9th at 9:00 a.m. in the Authority's office  
located at 1107 New Pointe Boulevard, Suite 17, Leland, North Carolina.*

## **AGENDA ITEM**

To: CHAIRMAN RIVENBARK AND BOARD MEMBERS

From: TIM H. HOLLOMAN, EXECUTIVE DIRECTOR

Date: April 11, 2022

Re: Consent Agenda

Reviewed and approved as to form: MATTHEW A. NICHOLS, AUTHORITY ATTORNEY

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Please find enclosed the items of a routine nature for consideration and approval by the Board of Directors with one motion. However, that does not preclude a board member from selecting an item to be voted on individually, if so desired.

**C1-** Minutes of March 14, 2022, Regular Board Meeting

**C2-** Minutes of March 14, 2022, Finance Meeting

**C3-** Minutes of February 14, 2022, Regular Board Meeting

**C4-** Kings Bluff Monthly Operations and Maintenance Report

**C5-** Bladen Bluffs Monthly Operations and Maintenance Reports

**C6-** Line-Item Adjustment for February 28, 2022

**C7-** Resolution Adopting the Lower Cape Fear Water & Sewer Authority's Local Water Supply Plan for, Kings Bluff Raw Water Pump Station, PWSID 50-09-013, for calendar year 2021

**C8-** Resolution Adopting the Lower Cape Fear Water & Sewer Authority's Local Water Supply Plan for, Bladen Bluff's Regional Surface Water System, PWSID 50-09-013, for calendar year 2021

**C9-** Resolution by Governing Body of Applicant for the 48" Parallel Raw Water Main Preliminary Engineering Report & Rate Study Project

**C10-** Resolution by Governing Body of Applicant for the Generators at King's Bluff Raw Water Pump Station Project

**Action Requested:** Motion to approve/disapprove Consent Agenda.

Lower Cape Fear Water & Sewer Authority  
Regular Board Meeting Minutes  
March 14<sup>th</sup>, 2022

Chairman Rivenbark called to order the Authority meeting scheduled on March 14<sup>th</sup>, 2022, at 9:00 a.m. and welcomed everyone present. The meeting was held at the Authority's office located at 1107 New Pointe Boulevard, Suite 17, Leland, North Carolina. Director Norris gave the invocation.

**Roll Call by Chairman Rivenbark:**

**Present:** Norwood Blanchard, Patrick DeVane, Wayne Edge, Harry Knight, Al Leonard, Phil Norris, Scott Phillips, Charlie Rivenbark, Frank Williams, and Rob Zapple

**Present by Virtual Attendance:** Jackie Newton and Chris Smith

**Absent:** Bill Saffo and Bill Sue

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

**Guests Present:** Ken Waldroup Cape Fear Public Utility Authority Executive Director; Glenn Walker, Brunswick County Water Resources Manager, and Heidi Cox, NC DEQ Regional Engineering Supervisor, Division of Water Infrastructure

**Guests Virtual Attendance:** Tom Hendrick, Pender County Utilities; John Malone, Cape Fear Public Utility Authority Water Resources Manager; Matt Hourihan, Cape Fear Public Utility Authority Assistant Operations Director; Jordan Clark, Computer Warriors; and Shirley Lawler

**PLEDGE OF ALLEGIANCE:** Chairman Rivenbark led the Pledge of Allegiance.

Director Williams made a motion to excuse Director Sue's absence from the March 14, 2022, Board meeting.

**Motion:** Director Williams **MOVED**; seconded by Director Knight, approval of excusing Director Sue. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Patrick DeVane	X			
Wayne Edge	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton				X
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue				X
Frank Williams	X			
Rob Zapple	X			
Total	11	0	0	3

**APPROVAL OF CONSENT AGENDA**

**C1 - Minutes of February 14, 2022, Regular Board Meeting**

**C2 - Minutes of December 13, 2021, Long Range Planning Committee Meeting**

**C3 - Kings Bluff Monthly Operations and Maintenance Report**

**C4 - Bladen Bluffs Monthly Operations and Maintenance Reports**

**C5 - Budget Amendment #1**

**C6 - Final Master Planning Document**

**C7 - Resolution by Governing Body of Applicant for Replacement of the Walkway and Air Backwash Building at Kings Bluff Raw Water Pump Station**

**C8 - Resolution by Governing Body of Applicant for the Addition of a Fourth Raw Water Pump at Kings Bluff Raw Water Pump Station**

**C9 - Resolution by Governing Body of Applicant for the Addition of a New Standby Generator and a New Generator Building at Kings Bluff Raw Water Pump Station**

Director Williams requested C1 minutes for February 14, 2022, to be updated with the note that we were adopting the project plan, understanding that funding sources and methodologies were a future discussion, and that point was affirmed.

**Motion:** Director Blanchard **MOVED**; seconded by Director Williams approval of the Consent Agenda Items C2-C9 as presented. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Patrick DeVane	X			
Wayne Edge	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton				X
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue				X
Frank Williams	X			
Rob Zapple	X			
	11	0	0	3

**OLD BUSINESS**

**OB1 – Resolution Requesting Funding of a 10 Mile Parallel Line for the Lower Cape Fear Water and Sewer Authority**

Executive Director Holloman advised this resolution is also being considered by CFPUA and has already been approved by Bladen County. This is an additional step for funding the Parallel line to the 48-inch raw water main that supplies Pender County, CFPUA, and several industries on US 421. Director Zapple requested the statement, “should the Authority bear the costs for this project alone, the impact would cause our utility to double the rates and charges to our customers, from 0.33 per 1,000 gallons to 0.66 per 1,000 gallons” to be removed from the resolution.

**Motion:** Director Williams **MOVED**; seconded by Director Norris, approval Resolution Requestion Funding with removal of statement. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Patrick DeVane	X			
Wayne Edge	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton				X
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue				X
Frank Williams	X			
Rob Zapple	X			
	11	0	0	0

**NEW BUSINESS****NB1 – Replacement of office lighting fixtures throughout LCFWASA**

**Motion:** Director Leonard **MOVED**; seconded by Director Edge, approval of the Replacement of office lighting fixtures throughout LCFWASA. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Patrick DeVane	X			
Wayne Edge	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton				X
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue				X
Frank Williams	X			
Rob Zapple	X			
	11	0	0	3

**NB2 A – Resolution of Lower Cape Fear Water & Sewer Authority Exempting Lower Cape Fear Water & Sewer Authority from The Provisions of N.C.G.S. §143-64.31 for Professional Consulting Engineering Services for the NC Division of Water Infrastructure State Revolving Fund Planning Study Grant Application Preparation for Rate Study**

**Motion:** Director Zapple **MOVED**; seconded by Director Leonard, approval of Exempting LCFWASA from the Provisions of N.C.G.S. §143-64.31. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Patrick DeVane	X			
Wayne Edge	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue				X
Frank Williams	X			
Rob Zapple	X			
	12	0	0	2

**NB2 B - Resolution for Professional Consulting Engineering Services for the NC Division of Water Infrastructure State Revolving Fund Planning Study Grant Application Preparation for Rate Study.**

**Motion:** Director Norris **MOVED**; seconded by Director Leonard, approval of Resolution for Grant Application Preparation for Rate Study. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Patrick DeVane	X			
Wayne Edge	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue				X
Frank Williams	X			
Rob Zapple	X			
	12	0	0	2

**ENGINEER'S COMMENTS**

No comments

**ATTORNEY COMMENTS**

No comments

**EXECUTIVE DIRECTOR REPORT****EDR1 – Comments on Customers' Water Usage and Raw Water Revenue for Fiscal Year to Date Ending January 31, 2022**

Executive Director Holloman reported that during the month of February 2022, CFPWA was above projections. Brunswick County and Pender County were below projections. Monthly revenue was slightly up last month. Compass Pointe contacted Executive Director Holloman about purchasing seasonal raw water for their irrigation systems. This is in the beginning phases, and LCFWASA is working with Tony Boahn and Brunswick County.

**DIRECTOR'S COMMENTS AND/OR FUTURE AGENDA ITEMS**

Director Zapple would like an update on cyber security.

**PUBLIC COMMENT**

No comments

**ADJOURNMENT**

There being no further business, Chairman Rivenbark adjourned the meeting at 9:23 a.m.

Respectfully Submitted:

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 Harry Knight, Secretary

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**Lower Cape Fear Water & Sewer Authority****Finance Committee Meeting Minutes****March 14, 2022**

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Chairman Rivenbark called to order the Finance Committee Meeting on March 14, 2022, at 8:35 a.m. The meeting was held at the Authority's office located at 1107 New Pointe Boulevard, Suite 17, Leland, North Carolina.

**Present:** Al Leonard, Norwood Blanchard, Charlie Rivenbark, and Patrick DeVane

**Absent:** Phil Norris

**Present by Virtual Attendance:** Chris Smith

**Staff:** Tim Holloman, Executive Director; Patrick Flanagan, COG; and Danielle Hertzog, Financial Administrative Assistant

**Guests Present:** Rob Zapple

**Guests Virtual Attendance:** John Nichols, Brunswick County Public Utilities Director and Jordan Clark, Computer Warriors

**A) PowerPoint for Annual Budget Fiscal Year 2022-2023**

Executive Director Holloman reviewed essential cost items for the FY 2022-2023 draft budget. Our customers have projected to use 9,382,106 gallons of water for an estimated revenue of 3.1 million. Health insurance and state retirement will both increase in cost. Health insurance increases by 5% for 1,800 dollars annually, and state retirement will increase from 11.35% to 12.1. LCFWASA will be financing a forklift for Kings Bluff Plant for thirty thousand. We have a VFD replacement budgeted as a capital expense. VTR Pump rehabilitation and anti-vortex equipment are also needed at Kings Bluff Plant. The independence rate study or cost of service study is in the budget; however, in the Board meeting, LCFWASA would like to apply for a grant for the rate study. Chairman Rivenbark was concerned with the cost of the rate study. Executive Director Holloman advised the company providing the rate study would also provide the methodology for splitting the cost. We would have an RFP for vendors to submit. The draft annual budget is the maximum cost for the independent rate study. Engineering cost for this year is for the annual inspection report and will have no increase. Based on customer projections and the Planning Document, a 0.02 rate increase is recommended.

The FY 22-23 budget is a 3% increase from the FY21-22 budget due primarily to operating capital expenses and building the R & R Fund.

**ADJOURNMENT**

There being no further business, Chairman Rivenbark adjourned the meeting at 8:50 a.m.

Respectfully Submitted,

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Tim Holloman, Executive Director

The next Finance Committee Meeting of the Lower Cape Fear Water & Sewer Authority is scheduled for Monday, May 9<sup>th</sup>, 2022, at 8:30 a.m. in the Authority's office located at 1107 New Pointe Boulevard, Suite 17, Leland, North Carolina.

Lower Cape Fear Water & Sewer Authority  
Regular Board Meeting Minutes  
February 14<sup>th</sup>, 2022

Item C3

Chairman Rivenbark called to order the Authority meeting scheduled on February 14<sup>th</sup>, 2022, at 9:00 a.m. and welcomed everyone present. The meeting was held at the Authority's office located at 1107 New Pointe Boulevard, Suite 17, Leland, North Carolina. Director Leonard gave the invocation.

**Roll Call by Chairman Rivenbark:**

**Present:** Norwood Blanchard, Patrick DeVane, Wayne Edge, Harry Knight, Al Leonard, Jackie Newton, Phil Norris, Scott Phillips, Charlie Rivenbark, Chris Smith, and Bill Sue

**Present by Virtual Attendance:** Jackie Newton, Phil Norris, Bill Saffo, Frank Williams, and Rob Zapple

**Absent:** None

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

**Guests Present:** Ken Waldroup Cape Fear Public Utility Authority Executive Director; Sean Kenyon P.E., McKim & Creed; Glenn Walker, Brunswick County Water Resources Manager, and Kenny Keel Pender County Public Utilities Director

**Guests Virtual Attendance:** Tom Hendrick, Pender County Utilities; John Nichols, Brunswick County Public Utilities Director; John, Cape Fear Public Utility Authority Water Resources Manager; Heidi Cox, NC DEQ Regional Engineering Supervisor, Division of Water Infrastructure and Joshua Trouton, Computer Warriors

**PLEDGE OF ALLEGIANCE:** Chairman Rivenbark led the Pledge of Allegiance.

**APPROVAL OF CONSENT AGENDA**

**C1 - Minutes of January 10, 2022, Regular Board Meeting**

**C2 - Kings Bluff Monthly Operations and Maintenance Reports**

**C3 - Bladen Bluffs Monthly Operations and Maintenance Reports**

**C4 - Line-Item Adjustment for January 31, 2022**

**Motion:** Director Leonard **MOVED**; seconded by Director DeVane, approval of the Consent Agenda Items as presented. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Wayne Edge	X			
Patrick DeVane	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo	X			
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple	X			
	14	0	0	0

**OLD BUSINESS**

**OB1 – Resolution for a Letter of Response to Financial Performance Areas of Concern for LGC**

Executive Director Holloman advised the letter was requested to be sent to the Local Government Commission as recommended by Auditors.

**Motion:** Director Leonard **MOVED**; seconded by Director Knight. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Wayne Edge	X			
Patrick DeVane	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo	X			
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple	X			
	14	0	0	0

## NEW BUSINESS

### **NB1 – Resolution Awarding Annual Audit Contract for Fiscal Year Ending June 30, 2022, to Thompson, Price, Scott, Adams & Co. P.A in the amount of \$8,000.00**

Executive Director Holloman advised that the audit firm had new staff work on the previous year's audit. After four years, we will go out for an RFP for another auditor.

**Motion:** Director Sue **MOVED**; seconded by Director Edge, approval of the Resolution to Award Annual Audit Contract to Thompson, Price, Scott, Adams & Co. P.A. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Wayne Edge	X			
Patrick DeVane	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo	X			
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple	X			
	14	0	0	0

### **NB2 – Draft Master Plan for 25 Year Planning Period FY 2022-2046 Presentation by Sean Kenyon with McKim & Creed**

Sean Kenyon met with Long Range Planning Committee back in December of 2021. McKim & Creed was tasked with creating a 25-year outlook for projects that needed to be completed within that period. The projects were identified with categories that included capacity, renewal and rehabilitation, efficiency, and any maintenance over those 25 years. Each project was assigned a criticality score of one, two, or three. We always strive to ensure that we have enough water to drive to the system and convey to all our customers. The lifecycle of items also had to be looked at in the planning criticality. The current master plan is in today's dollar; however, since the master plan will be reviewed annually, the cost will increase to reflect the market. One of the main projects that have been updated is the parallel raw water main coming from the ground storage tank to CFPWA. This project was originally scheduled

beyond 2046, but with the recent leak, this project has been moved up to 2023. KB 9 Right of Way Acquisitions has been moved up a couple of years due to direction from the board. KB 11 Intermediate Booster Pump Station Shelter was also a board member's concern, but after reviewing all projects and criticality, this project will remain as is. Two new projects have been added, KB17, which is the pigging of the 48-inch water main from the ground storage tank down to CFPWA. This is because there was a lot of sand found in the pipe during the break in the line. This pigging cost is higher because the necessary infrastructure will need to be installed first and then the pigging completed. The second new project is now KB15 48-inch parallel raw water US 421 will be a long parallel line from the ground storage down to the CFPWA meter vault. Director Zapple had a concern about the projections for Pender County since they were completed back in 2018, and Pender County is continually growing in population. Kenny Keel advised he feels comfortable with the predictions and states they are accurate. He also advised Pender County will have additional sources that will help meet the demand. Director Williams advised adopting the project plan, understanding that funding sources and methodologies were a future discussion, and that point was affirmed.

**Motion:** Director Williams **MOVED**; seconded by Director Sue, approval of NB3 Draft Master Planning Document. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Wayne Edge	X			
Patrick DeVane	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo	X			
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple	X			
	14	0	0	0

**NB3 A) Resolution of Lower Cape Fear Water & Sewer Authority Exempting Lower Cape Fear Water & Sewer Authority from The Provisions of N.C.G.S. §143-64.31 for Professional Consulting Engineering Services for Kings Bluff Air Backwash and Walkway System Alternative Evaluation.**

Under North Carolina law, when a public entity such as the Authority solicits bids from engineers, surveyors, and architects, they must go through a request for proposal process where the applicants' qualifications are considered without consideration of price. However, if the projected cost of the service is less than \$50,000.00, the entity has the right to exempt itself from that process. Approval of the presented resolution waives this requirement for a proposal submitted by McKim & Creed per proposal 220407 in the fixed amount of \$7,000.00 for Professional Consulting Engineering Services for Kings Bluff Air Backwash and Walkway System Alternative Evaluation.

**Motion:** Director Leonard **MOVED**; seconded by Director Sue, approval Exempting LCFWASA from the Provisions of N.C.G.S. §143-64.31. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Wayne Edge	X			
Patrick DeVane	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo	X			
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple	X			
	14	0	0	0

**NB3 B – Resolution for Professional Consulting Engineering Services for Kings Bluff Air Backwash and Walkway System Alternative Evaluation**

Tony Boahn advised this is one of our CIP projects to replace the old air backwash system and walkway at Kings Bluff. The project was estimated to be around one million to one and half million. The project would replace the approximately 1,000 feet of walkway and two wooden buildings that hold the air tanks. These air tanks are used to blow air back through the screen to remove the silt off the screens. Mr. Boahn has been working with the screen manufacturers to see if the air tanks could be moved onto the banks to eliminate a thousand feet of walkway. The manufacturers have given preliminary indications that it is technically feasible. This is for a top-level evaluation to generate an approximate cost. Tony advised we have an application to prepare and submit to Drinking water SPF for the walkway.

**Motion:** Director Blanchard **MOVED**; seconded by Director Edge, approval of NB3 B Resolution for Professional Consulting Engineering Services for Kings Bluff Air Backwash and Walkway System Alternative Evaluation. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	<u>For</u>	<u>Against</u>	<u>Abstained</u>	<u>Absent</u>
Norwood Blanchard	X			
Wayne Edge	X			
Patrick DeVane	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple	X			
	13	0	0	1

**NB4 A) Resolution of Lower Cape Fear Water & Sewer Authority Exempting Lower Cape Fear Water & Sewer Authority from The Provisions of N.C.G.S. §143-64.31 for Professional Consulting Engineering Services for Existing 48" Aerial Crossing at Livingston Creek Structural Design for Access Platform.**

Under North Carolina law, when a public entity such as the Authority solicits bids from engineers, surveyors, and architects, they must go through a request for proposal process where the applicants' qualifications are considered without consideration of price. However, if the projected cost of the service is less than \$50,000.00, the entity has the right to exempt itself from that process. Approval of the presented resolution waives this requirement for a proposal

submitted by McKim & Creed per proposal M&C 220423 in the fixed amount of \$9,800.00 Professional Consulting Engineering Services for Existing 48" Aerial Crossing at Livingston Creek Structural Design for Access Platform.

**Motion:** Director Leonard **MOVED**; seconded by Director Sue, approval Exempting LCFWASA from the Provisions of N.C.G.S. §143-64.31. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	For	Against	Abstained	Absent
Norwood Blanchard	X			
Wayne Edge	X			
Patrick DeVane	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple	X			
	13	0	0	1

**NB4 B – Resolution for Professional Consulting Engineering Services for Existing 48" Aerial Crossing at Livingston Creek Structural Design for Access Platform**

**Motion:** Director DeVane **MOVED**; seconded by Director Williams, approval of NB4 B Resolution for Professional Consulting Engineering Services for Existing 48" Aerial Crossing at Livingston Creek Structural Design for Access Platform. Upon vote, the **MOTION CARRIED UNANIMOUSLY**.

	For	Against	Abstained	Absent
Norwood Blanchard	X			
Wayne Edge	X			
Patrick DeVane	X			
Harry Knight	X			
Al Leonard	X			
Jackie Newton	X			
Phil Norris	X			
Scott Phillips	X			
Charlie Rivenbark	X			
Bill Saffo				X
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple				X
	12	0	0	2

**NB5 – Presentations by Tony Boahn regarding the 10-Mile Parallel Raw Water Main Preliminary Cost Estimates**

Tony Boahn advised this presentation is regarding the second ten miles of the pipeline where the leak occurred. Option one is to continue the current 48-inch pipeline with the same 48-inch parallel raw water main with a price of 54.3 million. Then we have option two, which utilizes a 36-inch parallel raw water main with a price of 47.3 million. Based on a pure capacity standpoint, Mr. Boahn advised he feels the 36-inch pipeline is a real possibility. The cost estimates were sixty million in the CIP, so both are within those numbers. Both assessments have been quoted with directional drilling under the Cape Fear River. That is an expensive endeavor being around a thousand dollars per foot. A detailed engineering study will need to be performed on this parallel raw water main just like we did on the 54-inch parallel raw water main. We looked at different sizes, materials, energy costs, and every piece and part to

make the best decision on that pipe size and material. There's a possibility we can open cut the river, and there's a lot of environmental issues. You must work with the Corps of Engineers, CAMA, and the State of North Carolina.

#### **ENGINEER'S COMMENTS**

Tony Boahn gave an update on the 54-inch parallel raw water main. The interconnections are still scheduled to be completed by April 26, 2022, with the original schedule being May 2022; therefore, the contractor is still one month ahead of schedule. There is a small leak at one of the ground tanks near a valve, this is not a significant leak, and Brunswick County is digging down to locate the leak today, February 14, 2022.

Tony Boahn advised that the leak in the 48" pipeline located at the southwest side of the Cape Fear River just behind the former DAK site has had 200 feet of restrained joint pipe replaced. The line stops and bypass was disengaged on January 19, 2022. The line ran for several days to make sure there were no issues. On January 24, a minor leak was discovered at valve, and it was a minor repair. Operational testing has been completed, and the line stops and bypass has been removed. The final cleanup is underway now.

#### **ATTORNEY COMMENTS**

No comments

#### **EXECUTIVE DIRECTOR REPORT**

##### **EDR1 – Comments on Customers' Water Usage and Raw Water Revenue for Fiscal Year to Date Ending January 31, 2022**

Executive Director Holloman reported that during the month of January 2022, Pender County was above projections. Brunswick County and CFPWA were below projections. Monthly revenue was down last month.

#### **DIRECTOR'S COMMENTS AND/OR FUTURE AGENDA ITEMS**

Director Leonard wants an update on the Lock and Dam. No new updates. It was confirmed that the Army Corps of Engineers have six million dollars for maintenance. It has been estimated that twenty-four million would be needed for all three lock systems.

#### **PUBLIC COMMENT**

No comments

#### **ADJOURNMENT**

There being no further business, Chairman Rivenbark adjourned the meeting at 10:02 a.m.

Respectfully Submitted:

\_\_\_\_\_  
Harry Knight, Secretary

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COUNTY OF BRUNSWICK  
PUBLIC UTILITIES DEPARTMENT  
Kings Bluff Pump Station



246 Private Road  
Riegelwood, NC 28456  
(910) 655-4799 Office  
(910) 655-4798 FAX

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**TO:** Tim Holloman

**FROM:** Jack Hogan

**DATE:** 4/1/2022

**SUBJECT:** Monthly maintenance report for March 2022

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Mr. Holloman,

The Maintenance and Operations of the king's bluff facility for the month of February were performed as prescribed in the station SOP'S and other items are as follows.

The diesel drive booster pumps along with the standby SCADA generator located at the raw tank and the SCADA generator located at INVISTA / CFPUA vaults off HWY 421 were run and tested weekly and verified standby ready.

KB personnel completed all locates issued by the 811 system.

KB personnel along with Glenn Walker worked on the 48" valve on the 48" line located off John Riegel Road that had some issues opening and closing. Will follow up when line is put back in service and more exercising can be done with flow on the line.

KB personnel along with BC generator dept. replaced the batteries and chargers that run the 24volt control panels on # 1 & # 2 EMD generators.

KB personnel assisted Underwood Pump Co. in the installation and testing of the Val Matic hydraulic actuator valve.

KB personnel accepted delivery of the replacement VFD and stored it in the VFD room to ensure warranty coverage.

KB personnel working with BC I&C dept. to replace # 1 power module and 6 fuses in # 5 VFD cabinet that shorted out and failed. It was replaced and # 5 VFD and pump back in service the same day. Cause of failure looks to be age of unit with 33,773 hours of service. This is the first operational issue with # 5 VFD since it was put in service back in 2008.

KB personnel are currently painting all the entry doors on the old and new side of KBPS.

KB personnel cleaned up around the Authority farm shed and pressure washed the concrete where dedication ceremony will be held.

KB personnel worked with BC I&C dept. on new SCADA computer upgrades and graphics.

KB personnel currently working with Garney on the crossover project with CFPUA'S 30" line and Authority lines located next to Kings Bluff Pump Station.

KB personnel are currently replacing all the exit signs and emergency lighting due to failing and expense of replacement batteries compared to entire new fixtures.  
KB personnel secured quotes and PO for the third HVAC unit to cool the VFD room.

**Contractors:**

NEWCOMB completed quarterly PM on # 1 & # 3 air handling unit located at the VFD building.

Underwood Pump Co. completed replacement of the # 4 pump Val Matic hydraulic actuator valve.

Underwood Pump Co. completed quarterly PM on 1, 4 & 5 pumps, motors and valves.

Thank you,  
Jack Hogan



To: Tim Holloman - LCFWASA

From: James Kern – Bladen Bluffs SWTP ORC

Date: 4/4/22

Subject: March 2022 Operations

During the month of March, Bladen Bluffs SWTP operated a total of 27 days, treating 63.04 million gallons of water.

We used:

56,748 lbs. of aluminum sulfate (Alum)

14,720 lbs. of sodium hydroxide (Caustic)

1,321 lbs. of sodium hypochlorite (2,653 gallons of 6% Chlorine Bleach)

**James Kern**  
**Water Treatment Plant**  
**Supervisor**

**Smithfield.**  
*Good food. Responsibly.®*

(910) 862-3114  
(910) 862-3146  
(910) 733-0016 mobile  
[jkern@smithfield.com](mailto:jkern@smithfield.com)

Bladen Bluffs Surface Water Treatment  
Plant  
17014 Highway 87 West  
Tar Heel, NC 28392  
[www.smithfieldfoods.com](http://www.smithfieldfoods.com)

# Monthly Operating Reports (MORs) Summary

(No user data entry – all values are auto-populated.)

Year: 2022 PWS Name: Bladen Bluffs Water System PWSID# : NC5009012  
 Month: March Facility Name: Bladen Bluff

## Combined Filter Effluent (CFE) Turbidity

Samples exceeding 1 NTU (count):	<u>0</u>	Number of samples required:	<u>144</u>
Samples exceeding .3 NTU (count):	<u>0</u>	Number of samples taken:	<u>144</u>
Samples exceeding .3 NTU (pct):	<u>0.0%</u>	Highest single turbidity reading NTU:	<u>0.153</u>
		Monthly average turbidity NTU:	<u>0.072</u>

## Individual Filter Effluent (IFE) Turbidity

1) Was each filter <u>continuously</u> monitored for turbidity?	Yes	<u>X</u>	No	<u></u>
2) Was each filter's monitoring results <u>recorded every 15 minutes</u> ?	Yes	<u>X</u>	No	<u></u>
3) Was there a failure of the continuous turbidity monitoring equipment?	Yes	<u></u>	No	<u>X</u>
4) Was any individual filter turbidity level > 1.0 NTU in two consecutive measurements ?	Yes	<u></u>	No	<u>X</u>
5) Was any individual filter turbidity level > 0.5 NTU in two consecutive measurements at the end of 4 hours of operation after the filter has been backwashed or otherwise taken offline ?	Yes	<u></u>	No	<u>X</u>
6) Was any individual filter turbidity level > 1.0 NTU in two consecutive measurements in each 3 consecutive months ?	Yes	<u></u>	No	<u>X</u>
7) Was any individual filter turbidity level > 2.0 NTU in two consecutive measurements in 2 consecutive months ?	Yes	<u></u>	No	<u>X</u>

## Entry Point Residual Disinfectant Concentration (EPRD)

Disinfectant Used	<u>Chlorine</u>	Number of samples required	<u>144</u>
Minimum EPRD concentration	<u>0.8000</u>	Number of samples taken	<u>144</u>

## Distribution Residual Disinfectant Concentration

Number of samples under 0.010 mg/L (without any detectable) excluding where HPC is $\leq$ 500/mL	<u>0</u>
--	----------

## Contact Time (CT) Ratio

Lowest CT ratio reading	<u>10.03</u>	Number of CT ratios required	<u>27</u>
Number of CT ratios below 1.0	<u>0</u>	Number of CT ratios calculated	<u>27</u>

## Remarks From General Info Worksheet

☒ By checking this box, the ORC certifies that the requirements of 15A NCAC 18C .1301 "General Requirements", .1302 "Tests, Forms, and Reporting", and .1303 "Facility Oversight" have been met for the month of March, 2022 and that records documenting compliance with this rule are maintained on the premises and available for inspection upon request.

## Bladen Bluffs SWTP Maintenance Report

Date: 4/4/2022

### ISSUE:

### PLAN OF ACTION:

Air on finished water line (from GAC)	Installed trial valves – currently testing
Running spare cl2 lines to settled/finished	Work Scheduled
Sump pump check valve needs replacement	Scheduled repair
All PLC need updated	Getting quotes
Ordering backup drives for all pumps	Ordered
Transformer on Blower Bad	FIXED
Found small leak in lagoon liner	Contractor has inspected
State recommended filter media inspection	Decided no inspection needed (NO treatment issues)
CL2 leaks	Preparing to repair plumbing
Clearwells Inspection	Inspection COMPLETE, awaiting recommendations
Clearwell Drain line leaks	Utilities marked, digging soon
Keep losing radio signal in finished building	Going to run fiber
Lost signal to three cameras at river	Entire system old, contractors quoting updates

**CONSENT AGENDA (CA-6)****Lower Cape Fear Water & Sewer Authority**

**CONSENT ITEM-** Background: Line-Item adjustments are made to more closely align revenues and expenditures to actuals without exceeding or decreasing the approved or amended budget

**LINE-ITEM ADJUSTMENTS FOR 02/28/2022**

<b>Operating Fund:</b>	<b>Line-Item Budget Amount prior to Adjustment</b>	<b>Decrease</b>	<b>Increase</b>	<b>Budget Amount as of 02/28/2022</b>
<b>REVENUE</b>				
<b>EXPENSES</b>				
4070-01 Travel and Training	\$ 19,300		\$ 2,500	\$ 21,800
4501-00 Sales Tax Expenses	\$ 90,000		\$ 20,000	\$ 110,000
4520-01 Utilities-Energy Pump Station	\$ 775,667	\$ (22,500)		\$ 753,167
<b>Total</b>	<b>6,642,523</b>	<b>\$(22,500)</b>	<b>\$22,500</b>	<b>\$ 6,642,523</b>

**Resolution Adopting the Lower Cape Fear Water & Sewer Authority's  
Local Water Supply Plan for Kings Bluff Raw Water Pump Station,  
PWSID 50-09-013, for Calendar Year 2021**

**Whereas**, North Carolina General Statute 143-335 (l) requires that each system that provides public water services or plans to provide such services shall, either individually or together with other systems, prepare and submit a Local Water Supply Plan at least once each five years; and

**Whereas**, as required by the statute and in the interests of sound local planning, the Lower Cape Fear Water & Sewer Authority's Local Water Supply Plan for calendar year 2021 for Kings Bluff Raw Water Pump Station, has been developed and submitted to the Board of Directors for approval; and

**Whereas**, the Board of Directors for the Lower Cape Fear Water & Sewer Authority (Authority) find that the Local Water Supply Plan is in accordance with the provisions of North Carolina General Statute 143-355 (l) and that it will provide appropriate guidance for the future management of water supplies for the Authority, as well as useful information to the Department of Environmental Quality for the development of a state water supply plan as required by statute.

**Now, Therefore, Be It Resolved** by the Chairman and Board of Directors of the Lower Cape Fear Water & Sewer Authority that the Local Water Supply Plan for calendar year 2021 for Kings Bluff Raw Water Pump Station is approved for submittal to the Department of Environmental Quality, Division of Water Resources (Department); and

**Be It Further Resolved** that the Board of Directors of the Authority intends that this plan shall be revised to reflect changes in relevant data and projections at least once every five years or as otherwise requested by the Department, in accordance with the statute and sound planning practice.

**This Resolution adopted this 11th day of April 2022.**

\_\_\_\_\_  
**Charlie Rivenbark, Chairman**

ATTEST:

\_\_\_\_\_  
**Harry Knight, Secretary**

# LCFWSA - Kings Bluff

[Plan](#) | [Worksheet](#) | [QFW](#) | [Tasks](#)

2021 ▾

Reviewed: [Yes](#) [No](#)

The Division of Water Resources (DWR) provides the data contained within this Local Water Supply Plan (LWSP) as a courtesy and service to our customers. DWR staff does not field verify data. Neither DWR, nor any other party involved in the preparation of this LWSP attests that the data is completely free of errors and omissions. Furthermore, data users are cautioned that LWSPs labeled **PROVISIONAL** have yet to be reviewed by DWR staff. Subsequent review may result in significant revision. Questions regarding the accuracy or limitations of usage of this data should be directed to the water system and/or DWR.

## 1. System Information

### Contact Information

Water System Name: **LCFWSA - Kings Bluff**  
 Mailing Address: **1107 New Pointe Blvd., Suite # 17  
 Leland, NC 28451**

PWSID: **50-09-013**Ownership: **Authority****Provisional**

Contact Person: **Tim H Holloman**  
 Phone: **910-383-1919**  
 Email: [director@lcfwsa.gov](mailto:director@lcfwsa.gov)

Title: **Executive Director**  
 Cell/Mobile: **—**

### Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Other	48	80.00 %
Other	54	20.00 %

What are the estimated total miles of distribution system lines? **38 Miles**How many feet of distribution lines were replaced during 2021? **200 Feet**How many feet of new water mains were added during 2021? **73,920 Feet**How many meters were replaced in 2021? **0**How old are the oldest meters in this system? **12 Year(s)**How many meters for outdoor water use, such as irrigation, are not billed for sewer services? **0**What is this system's finished water storage capacity? **0.0000 Million Gallons**Has water pressure been inadequate in any part of the system since last update? *Line breaks that were repaired quickly should not be included.* **Yes**

### Programs

Does this system have a program to work or flush hydrants? **No**Does this system have a valve exercise program? **Yes, Semi-Annually**Does this system have a cross-connection program? **No**Does this system have a program to replace meters? **No**Does this system have a plumbing retrofit program? **No**Does this system have an active water conservation public education program? **Yes**Does this system have a leak detection program? **Yes**

Monitor the line visually and by SCADA

### Water Conservation

What type of rate structure is used? **Flat/Fixed**

How much reclaimed water does this system use? **0.0000 MGD** For how many connections? **0**

Does this system have an interconnection with another system capable of providing water in an emergency? **No**

## 2. Water Use Information

### Service Area

Sub-Basin(s)	% of Service Population	County(s)	% of Service Population
Cape Fear River (02-3)	100 %	Brunswick	80 %
		New Hanover	19 %
		Pender	1 %

What was the year-round population served in 2021? **0**

System Map: [download](#) 

Has this system acquired another system since last report? **No**




File uploaded

### Water Use by Type

Type of Use	Metered Connections	Metered Average Use (MGD)	Non-Metered Connections	Non-Metered Estimated Use (MGD)
Residential	0	0.0000	0	0.0000
Commercial	0	0.0000	0	0.0000
Industrial	2	0.0209	0	0.0000
Institutional	0	0.0000	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? **0.0000 MGD**

### Water Sales

Purchaser	PWSID	Average Daily Sold (MGD)	Days Used	MGD	Contract Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
Brunswick County	04-10-045	13.2875	365	24.0000	2022	Yes	Yes	48,54	Regular
		14.8510	365	24.0000		Yes	Yes	48,54	Regular
Cape Fear Public Utility Authority	04-65-010	11.2368	365	23.0000	2022	Yes	Yes	48,54	Regular
		9.1695	365	23.0000	2031	Yes	Yes	48,54	Regular
Pender County	70-71-011	1.5900	366	6.0000	2029	Yes	Yes	48,54	Regular
		1.4926	365	6.0000	2029	Yes	Yes	48,54	Regular

LCFWSA - Kings Bluff provide raw water to:

Brunswick County's current contract amount of 24 MGD will be increased to 50 MGD in June of 2022,

CFPUA's current contract amount of 23 MGD will be increased to 38 MGD in June of 2022, and

Pender County's current contract amount of 6 MGD has an option for an additional 5 MGD in June of 2029 from Brunswick County.

The allocated capacities reflect values that will be available upon completion of a new 54" parallel raw water transmission main. The parallel main is scheduled to be completed in 2021.

## 3. Water Supply Sources

### Monthly Withdrawals & Purchases

	Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)
Jan	22.1320	27.8310	May	37.0000	44.5710	Sep	35.2340	41.1240
Feb	25.1250	31.2730	Jun	31.4970	40.8410	Oct	34.4980	43.5780

Mar	23.7630	36.0880	Jul	37.5380	41.6820	Nov	39.5650	58.8600
Apr	29.6860	34.8210	Aug	34.7850	43.2360	Dec	20.4510	22.8970

We did have a major leak from November.



### Ground Water Sources



#### Surface Water Sources

Stream	Reservoir	Average Daily Withdrawal		Maximum Day Withdrawal (MGD)	Available Raw Water Supply		Usable On-Stream Raw Water Supply Storage (MG)
		MGD	Days Used		MGD	* Qualifier	
Cape Fear River	Lock and Dam No. 1	30.9395	365	0.0000	96.0000	F	0.0000

\* Qualifier: C=Contract Amount, SY20=20-year Safe Yield, SY50=50-year Safe Yield, F=20% of 7Q10 or other instream flow requirement, CUA=Capacity Use Area Permit

#### Surface Water Sources (continued)

Stream	Reservoir	Drainage Area (sq mi)	Metered?	Sub-Basin	County	Year Offline	Use Type
Cape Fear River	Lock and Dam No. 1	5,255	Yes	Cape Fear River (02-3)	Bladen		Regular

What is this system's off-stream raw water supply storage capacity? **3 Million gallons**

Are surface water sources monitored? **Yes, Daily**

Are you required to maintain minimum flows downstream of its intake or dam? **No**

Does this system anticipate transferring surface water between river basins? **No**



#### Water Purchases From Other Systems

Seller	PWSID	Average Daily Purchased (MGD)	Days Used	Contract		Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type	
				MGD	Expiration				Recurring
Cape Fear Public Utility Authority	04-65-015					Yes	No	24	Emergency

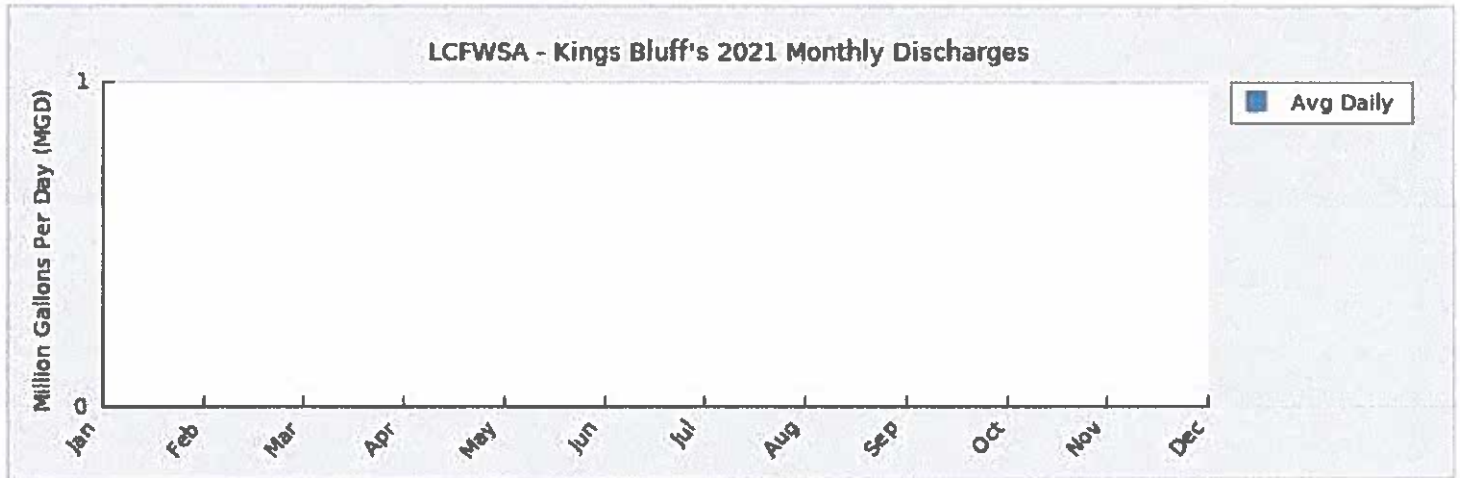
### Water Treatment Plants

## 4. Wastewater Information



#### Monthly Discharges

Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)	
Jan	0.0000	May	0.0000	Sep	0.0000
Feb	0.0000	Jun	0.0000	Oct	0.0000
Mar	0.0000	Jul	0.0000	Nov	0.0000
Apr	0.0000	Aug	0.0000	Dec	0.0000



How many sewer connections does this system have? 0

How many water service connections with septic systems does this system have? 0

Are there plans to build or expand wastewater treatment facilities in the next 10 years? No

[Wastewater Permits](#)

[Wastewater Interconnections](#)

## 5. Planning

### Projections

	2021	2030	2040	2050	2060	2070
Year-Round Population	0	0	0	0	0	0
Seasonal Population	0	0	0	0	0	0
Residential	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Commercial	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Industrial	0.0209	0.2500	0.2500	0.2500	0.2500	0.2500
Institutional	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
System Process	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unaccounted-for	4.7999	8.1867	8.1585	8.1258	8.0845	8.1990

### Future Water Sales

Purchaser	PWSID	MGD	Contract Year Begin	Year End	Pipe Size(s) (Inches)	Use Type
Brunswick County	04-10-045	26.0000	2022		48,54	Regular
CFPUA - Wilmington	04-65-010	15.0000	2022		48,54	Regular

Brunswick County 26.0 MGD will bring the total purchase to 50 MGD.  
CFPUA - Wilmington 15.0 MGD will bring the total purchase to 38 MGD.

[Future Supplies](#)

### Demand v/s Percent of Supply

	2021	2030	2040	2050	2060	2070
Surface Water Supply	96.0000	96.0000	96.0000	96.0000	96.0000	96.0000
Ground Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Purchases	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Future Supplies		0.0000	0.0000	0.0000	0.0000	0.0000
Total Available Supply (MGD)	96.0000	96.0000	96.0000	96.0000	96.0000	96.0000
Service Area Demand	4.8208	8.4367	8.4085	8.3758	8.3345	8.4490

Sales	26.1187	53.0000	53.0000	53.0000	53.0000	53.0000
Future Sales		41.0000	41.0000	41.0000	41.0000	41.0000
Total Demand (MGD)	30.9395	102.4367	102.4085	102.3758	102.3345	102.4490
Demand as Percent of Supply	32%	107%	107%	107%	107%	107%



The purpose of the above chart is to show a general indication of how the long-term per capita water demand changes over time. The per capita water demand may actually be different than indicated due to seasonal populations and the accuracy of data submitted. Water systems that have calculated long-term per capita water demand based on a methodology that produces different results may submit their information in the notes field.

Your long-term water demand is **unavailable until we receive population data for 2021** gallons per capita per day. What demand management practices do you plan to implement to reduce the per capita water demand (i.e. conduct regular water audits, implement a plumbing retrofit program, employ practices such as rainwater harvesting or reclaimed water)? If these practices are covered elsewhere in your plan, indicate where the practices are discussed here. **No Changes**

Are there other demand management practices you will implement to reduce your future supply needs? **We have adopted a Water Shortage Emergency Plan and implemented since 2020.**

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs? **All member utilities have alternate water sources with plans to expand.**

How does the water system intend to implement the demand management and supply planning components above? **Continue working with NC DEQ and USACE to preserve the water supply created by Lock and Dam #1**

The demand-to-supply ratio in the Lower Cape Fear Water and Sewer Authority (LCFWSA)- King's Bluff Local Water Supply Plan (LWSP) is currently above 80% because the available raw water supply is fully allocated to the existing customers and partners (i.e., Praxair, Inc., Brunswick County, Cape Fear Public Utility Authority, and Pender County). Based on a 7Q10 calculation, the total available withdrawal is 106 MGD at Lock & Dam No.1 (96 MGD for LCFWSA and 10 MGD for Cape Fear Public Utility Authority). Even so, the currently projected demands of all partners -- when totaled -- remain below 80% of the available raw water supply for the foreseeable future (i.e., 2050). Furthermore, all the partners have agreed not to exceed the demands currently projected in their LWSP, without notice to NCDWR, even though these amounts may remain less than what LCFWSA -- King's Bluff is obligated to sell them. However, should projected water demands of the partners increase to such amounts where the demand-to-supply ratio in the LCFWSA King's Bluff LWSP exceeds 80%, a long-term water supply plan to address future demands would be needed, per statutory requirements, before NCDWR could approve the LWSP.

#### [Edit Demand Note](#)



#### Additional Information

Has this system participated in regional water supply or water use planning? **Yes, Working with partners to assess current and future needs annually.**

What major water supply reports or studies were used for planning? **In house studies.**

Please describe any other needs or issues regarding your water supply sources, any water system deficiencies or needed improvements (storage, treatment, etc.) or your ability to meet present and future water needs. Include both quantity and quality considerations, as well as financial, technical, managerial, permitting, and compliance issues.

The Division of Water Resources (DWR) provides the data contained within this Local Water Supply Plan (LWSP) as a courtesy and service to our customers. DWR staff does not field verify data. Neither DWR, nor any other party involved in the preparation of this LWSP attests that the data is completely free of errors and omissions. Furthermore, data users are cautioned that LWSPs labeled **PROVISIONAL** have yet to be reviewed by DWR staff. Subsequent review may result in significant revision. Questions regarding the accuracy or limitations of usage of this data should be directed to the water system and/or DWR.

**Resolution Adopting the Lower Cape Fear Water & Sewer Authority's  
Local Water Supply Plan for Bladen Bluffs Regional Surface Water System,  
PWSID 50-09-012 for Calendar Year 2021**

**Whereas**, North Carolina General Statute 143-335 (l) requires that each system that provides public water services or plans to provide such services shall, either individually or together with other systems, prepare and submit a Local Water Supply Plan at least once each five years; and

**Whereas**, as required by the statute and in the interests of sound local planning, the Lower Cape Fear Water & Sewer Authority's Local Water Supply Plan for calendar year 2021 for Bladen Bluffs Regional Surface Water System, has been developed and submitted to the Board of Directors for approval; and

**Whereas**, the Board of Directors for the Lower Cape Fear Water & Sewer Authority (Authority) find that the Local Water Supply Plan is in accordance with the provisions of North Carolina General Statute 143-355 (l) and that it will provide appropriate guidance for the future management of water supplies for the Authority, as well as useful information to the Department of Environmental Quality for the development of a state water supply plan as required by statute.

**Now, Therefore, Be It Resolved** by the Chairman and Board of Directors of the Lower Cape Fear Water & Sewer Authority that the Local Water Supply Plan for calendar year 2021 for Bladen Bluffs Regional Surface Water System is approved for submittal to the Department of Environmental Quality, Division of Water Resources; (Department); and

**Be It Further Resolved** that the Board of Directors of the Authority intends that this plan shall be revised to reflect changes in relevant data and projections at least once every five years or as otherwise requested by the Department, in accordance with the statute and sound planning practice.

**This Resolution adopted this 11th day of April 2022.**

---

Charlie Rivenbark, Chairman

ATTEST:

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Harry Knight, Secretary

# Bladen Bluffs - LCFWSA

2021 ▾

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## 1. System Information

### Contact Information

Water System Name:	Bladen Bluffs - LCFWSA	PWSID:	50-09-012
Mailing Address:	1107 New Pointe Blvd., Suite # 17 Leland, NC 28451	Ownership:	Authority
Contact Person:	Tim Holloman	Title:	Executive Director
Phone:	910-383-1919	Cell/Mobile:	—
Secondary Contact:	James Kern	Phone:	910-733-0016
Mailing Address:	PO Box 100 Tar Heel, NC 28392	Cell/Mobile:	—

**Provisional**

### Distribution System

Line Type	Size Range (Inches)	Estimated % of lines
Ductile Iron	24	100.00 %

What are the estimated total miles of distribution system lines? **1 Miles**

How many feet of distribution lines were replaced during 2021? **0 Feet**

How many feet of new water mains were added during 2021? **0 Feet**

How many meters were replaced in 2021? **0**

How old are the oldest meters in this system? **0 Year(s)**

How many meters for outdoor water use, such as irrigation, are not billed for sewer services? **0**

What is this system's finished water storage capacity? **4.0000 Million Gallons**

Has water pressure been inadequate in any part of the system since last update? *Line breaks that were repaired quickly should not be included.* **No**

### Programs

Does this system have a program to work or flush hydrants? **No**

Does this system have a valve exercise program? **No**

Does this system have a cross-connection program? **No**

Does this system have a program to replace meters? **No**

Does this system have a plumbing retrofit program? **No**

Does this system have an active water conservation public education program? **No**

Does this system have a leak detection program? **No**

### Water Conservation

What type of rate structure is used? **Other**

How much reclaimed water does this system use? **0.0000 MGD** For how many connections? **0**

Does this system have an interconnection with another system capable of providing water in an emergency? **Yes**

## 2. Water Use Information

### Service Area

Sub-Basin(s)	% of Service Population	County(s)	% of Service Population
Cape Fear River (02-3)	100 %	Bladen	100 %

What was the year-round population served in 2021? 0

Has this system acquired another system since last report? No

### Water Use by Type

Type of Use	Metered Connections	Metered Average Use (MGD)	Non-Metered Connections	Non-Metered Estimated Use (MGD)
Residential	0	0.0000	0	0.0000
Commercial	0	0.0000	0	0.0000
Industrial	0	0.0000	0	0.0000
Institutional	0	0.0000	0	0.0000

How much water was used for system processes (backwash, line cleaning, flushing, etc.)? 0.0545 MGD

### Water Sales

Purchaser	PWSID	Average Daily Sold (MGD)	Days Used	MGD	Contract Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
Smithfield Packing Company	03-09-527	2.2921	227	4.0000		Yes	No	24	Regular

## 3. Water Supply Sources

### Monthly Withdrawals & Purchases

	Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)		Average Daily Use (MGD)	Max Day Use (MGD)
Jan	1.5083	2.8700	May	1.2141	2.8400	Sep	1.5946	3.0000
Feb	1.7775	3.1700	Jun	1.5351	3.0000	Oct	1.3568	3.0000
Mar	1.6492	2.9700	Jul	1.3209	3.5000	Nov	1.4817	3.0000
Apr	1.4718	3.0000	Aug	1.3265	2.9300	Dec	1.7274	3.1400



### Surface Water Sources

Stream	Reservoir	Average Daily Withdrawal		Maximum Day Withdrawal (MGD)	Available Raw Water Supply		Usable On-Stream Raw Water Supply Storage (MG)
		MGD	Days Used		MGD	* Qualifier	
Cape Fear River		2.4029	227	3.5000	6.0000	T	0.0000

\* Qualifier: C=Contract Amount, SY20=20-year Safe Yield, SY50=50-year Safe Yield, F=20% of 7Q10 or other instream flow requirement, CUA=Capacity Use Area Permit

### Surface Water Sources (continued)

Stream	Reservoir	Drainage Area (sq mi)	Metered?	Sub-Basin	County	Year Offline	Use Type
Cape Fear River		4,900	Yes	Cape Fear River (02-3)	Bladen		Regular

What is this system's off-stream raw water supply storage capacity? 0 Million gallons

Are surface water sources monitored? Yes, Daily

Are you required to maintain minimum flows downstream of its intake or dam? No

Does this system anticipate transferring surface water between river basins? No

### Water Purchases From Other Systems

Seller	PWSID	Average Daily Purchased (MGD)	Days Used	MGD	Contract Expiration	Recurring	Required to comply with water use restrictions?	Pipe Size(s) (Inches)	Use Type
Smithfield Packing Inc.	03-09-527	0.0000	0			Yes	No	24	Regular

## Water Treatment Plants

Plant Name	Permitted Capacity (MGD)	Is Raw Water Metered?	Is Finished Water Output Metered?	Source
Bladen Bluffs Surface Water Tr	6.0000	Yes	Yes	Cape Fear River

Did average daily water production exceed 80% of approved plant capacity for five consecutive days during 2021? **No**

If yes, was any water conservation implemented? **No**

Did average daily water production exceed 90% of approved plant capacity for five consecutive days during 2021? **No**

If yes, was any water conservation implemented? **No**

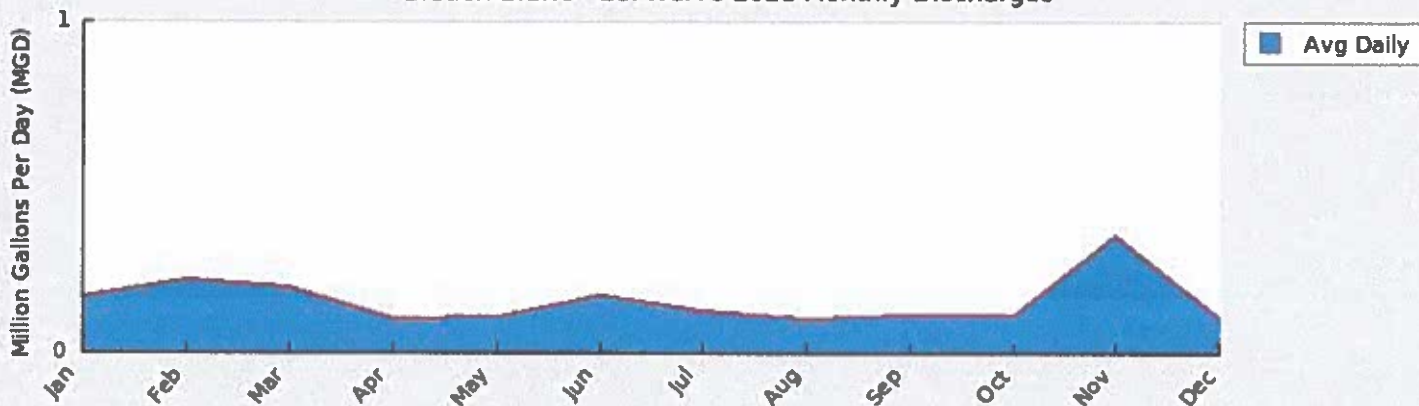
Are peak day demands expected to exceed the water treatment plant capacity in the next 10 years? **No**

## 4. Wastewater Information

## Monthly Discharges

	Average Daily Discharge (MGD)		Average Daily Discharge (MGD)		Average Daily Discharge (MGD)
Jan	0.1695	May	0.1143	Sep	0.1158
Feb	0.2250	Jun	0.1761	Oct	0.1149
Mar	0.1998	Jul	0.1318	Nov	0.3582
Apr	0.1043	Aug	0.1064	Dec	0.1108

Bladen Bluffs - LCFWSA's 2021 Monthly Discharges



How many sewer connections does this system have? 0

How many water service connections with septic systems does this system have? 0

Are there plans to build or expand wastewater treatment facilities in the next 10 years? No

## Wastewater Permits

Permit Number	Permitted Capacity (MGD)	Design Capacity (MGD)	Average Annual Daily Discharge (MGD)	Maximum Day Discharge (MGD)	Receiving Stream	Receiving Basin
NCG590020	1.5000	1.5000	0.1598	1.7500	Cape Fear River	Cape Fear River (02-3)

## 5. Planning

## Projections

2021	2030	2040	2050	2060	2070
------	------	------	------	------	------

						Item C8
Year-Round Population	0	0	0	0	0	0
Seasonal Population	0	0	0	0	0	0
Residential	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Commercial	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Industrial	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Institutional	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
System Process	0.0545	0.0545	0.0545	0.0545	0.0545	0.0545
Unaccounted-for	0.0144	0.0144	0.0144	0.0144	0.0144	0.0144

#### Demand v/s Percent of Supply

	2021	2030	2040	2050	2060	2070
Surface Water Supply	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000
Ground Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Purchases	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Future Supplies		0.0000	0.0000	0.0000	0.0000	0.0000
Total Available Supply (MGD)	6.0000	6.0000	6.0000	6.0000	6.0000	6.0000
Service Area Demand	0.0689	0.0689	0.0689	0.0689	0.0689	0.0689
Sales	1.4255	4.0000	4.0000	4.0000	4.0000	4.0000
Future Sales		0.0000	0.0000	0.0000	0.0000	0.0000
Total Demand (MGD)	1.4944	4.0689	4.0689	4.0689	4.0689	4.0689
Demand as Percent of Supply	25%	68%	68%	68%	68%	68%



The purpose of the above chart is to show a general indication of how the long-term per capita water demand changes over time. The per capita water demand may actually be different than indicated due to seasonal populations and the accuracy of data submitted. Water systems that have calculated long-term per capita water demand based on a methodology that produces different results may submit their information in the notes field.

Your long-term water demand is **unavailable until we receive population data for 2021** gallons per capita per day. What demand management practices do you plan to implement to reduce the per capita water demand (i.e. conduct regular water audits, implement a plumbing retrofit program, employ practices such as rainwater harvesting or reclaimed water)? If these practices are covered elsewhere in your plan, indicate where the practices are discussed here.

Are there other demand management practices you will implement to reduce your future supply needs?

What supplies other than the ones listed in future supplies are being considered to meet your future supply needs?

How does the water system intend to implement the demand management and supply planning components above?

#### Additional Information

Has this system participated in regional water supply or water use planning? No

What major water supply reports or studies were used for planning?

Please describe any other needs or issues regarding your water supply sources, any water system deficiencies or needed improvements (storage, treatment, etc.) or your ability to meet present and future water needs. Include both quantity and quality considerations, as well as financial, technical, managerial, permitting, and compliance issues:

The Division of Water Resources (DWR) provides the data contained within this Local Water Supply Plan (LWSP) as a courtesy and service to our customers. DWR staff does not field verify data. Neither DWR, nor any other party involved in the preparation of this LWSP attests that the data is completely free of errors and omissions. Furthermore, data users are cautioned that LWSPs labeled **PROVISIONAL** have yet to be reviewed by DWR staff. Subsequent review may result in significant revision. Questions regarding the accuracy or limitations of usage of this data should be directed to the water system and/or DWR.

## **Resolution by Governing Body of Applicant for the 48" Parallel Raw Water Main Preliminary Engineering Report & Rate Study Project**

**WHEREAS**, The Federal Clean Water Act Amendments of 1987 and the North Carolina the Water Infrastructure Act of 2005 (NCGS 159G) have authorized the making of loans and grants to aid eligible units of government in financing the cost of construction and studies drinking water system, and

**WHEREAS**, The Lower Cape Fear Water & Sewer Authority has need for and intends to conduct a 48-Inch Raw Water Main Preliminary Engineering Report & Rate Study, and

**WHEREAS**, The Lower Cape Fear Water & Sewer Authority intends to request State loan and/or grant assistance for the project,

### **NOW THEREFORE BE IT RESOLVED, BY THE BOARD OF COMMISSIONERS OF THE LOWER CAPE FEAR WATER AND SEWER AUTHORITY:**

That Lower Cape Fear Water & Sewer Authority, the Applicant, will arrange financing for all remaining costs of the project, if approved for a State loan and/or grant award.

That the governing body of the Applicant agrees to include in the loan agreement a provision authorizing the State Treasurer, upon failure of the Lower Cape Fear Water & Sewer Authority to make scheduled repayment of the loan, to withhold from the Lower Cape Fear Water & Sewer Authority any State funds that would otherwise be distributed to the local government unit in an amount sufficient to pay all sums then due and payable to the State as a repayment of the loan.

That Tim Holloman, Executive Director, the Authorized Official, and successors so titled, is hereby authorized to execute and file an application on behalf of the Applicant with the State of North Carolina for a loan and/or grant to aid in the study of or construction of the project described above.

That the Authorized Official, and successors so titled, is hereby authorized and directed to furnish such information as the appropriate State agency may request in connection with such application or the project: to make the assurances as contained above; and to execute such other documents as may be required in connection with the application.

That the Applicant has substantially complied or will substantially comply with all Federal, State, and local laws, rules, regulations, and ordinances applicable to the project and to Federal and State grants and loans pertaining thereto.

**THEREFORE, BE IT FURTHER RESOLVED**, that a copy of this resolution be recorded in the permanent minutes of this Board.

**Adopted this 11<sup>th</sup> day of April 2022.**

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**Charlie Rivenbark, Chairman**

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**Harry Knight, Secretary**

## **Resolution by Governing Body of Applicant for the Generators at King's Bluff Raw Water Pump Station Project**

**WHEREAS**, The Federal Clean Water Act Amendments of 1987 and the North Carolina the Water Infrastructure Act of 2005 (NCGS 159G) have authorized the making of loans and grants to aid eligible units of government in financing the cost of construction and studies drinking water system, and

**WHEREAS**, The Lower Cape Fear Water & Sewer Authority has need for and intends to replace standby generators and provide for associated building modifications at King's Bluff Raw Water Pump Station, and

**WHEREAS**, The Lower Cape Fear Water & Sewer Authority intends to request State loan and/or grant assistance for the project,

### **NOW THEREFORE BE IT RESOLVED, BY THE BOARD OF COMMISSIONERS OF THE LOWER CAPE FEAR WATER AND SEWER AUTHORITY:**

That Lower Cape Fear Water & Sewer Authority, the Applicant, will arrange financing for all remaining costs of the project, if approved for a State loan and/or grant award.

That the governing body of the Applicant agrees to include in the loan agreement a provision authorizing the State Treasurer, upon failure of the Lower Cape Fear Water & Sewer Authority to make scheduled repayment of the loan, to withhold from the Lower Cape Fear Water & Sewer Authority any State funds that would otherwise be distributed to the local government unit in an amount sufficient to pay all sums then due and payable to the State as a repayment of the loan.

That Tim Holloman, Executive Director, the Authorized Official, and successors so titled, is hereby authorized to execute and file an application on behalf of the Applicant with the State of North Carolina for a loan and/or grant to aid in the study of or construction of the project described above.

That the Authorized Official, and successors so titled, is hereby authorized and directed to furnish such information as the appropriate State agency may request in connection with such application or the project: to make the assurances as contained above; and to execute such other documents as may be required in connection with the application.

That the Applicant has substantially complied or will substantially comply with all Federal, State, and local laws, rules, regulations, and ordinances applicable to the project and to Federal and State grants and loans pertaining thereto.

**THEREFORE, BE IT FURTHER RESOLVED**, that a copy of this resolution be recorded in the permanent minutes of this Board.

**Adopted this 11<sup>th</sup> day of April 2022.**

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**Charlie Rivenbark, Chairman**

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**Harry Knight, Secretary**

## **AGENDA ITEM**

To: CHAIRMAN RIVENBARK AND BOARD MEMBERS

From: TIM H. HOLLOMAN, EXECUTIVE DIRECTOR

Date: April 11, 2022

Re: Quote for Variable Frequency Drive and VFD Critical Spares and additional revenue

Reviewed and approved as to form: MATTHEW A. NICHOLS, AUTHORITY ATTORNEY

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Background: VFD #5 is experiencing the same symptoms that VFD #4 had last year, causing it to be replaced. With the onset of the peak season, this replacement should proceed and not wait until the new Fiscal Year. The original sale of the currently installed drive was in response to an emergency replacement of the failed DBi5 model on-site, as such spare parts were not quoted at that time.

The warranty for this drive will expire in August 2022. Our recommendation, as well as the manufacturer, is that spare parts be stocked to avoid any issues with procurement times. The quoted lead time for these parts is 26 weeks. In communication with the manufacturer, CRU anticipates that this can be improved and will do everything we can.

TOTAL FOR TMEIC 1750 HP MVe2 VFD Spare Parts: \$103,975.00 Plus Tax

Also, revenues need to be increased for Invista/Stephan to reflect the additional revenues, and these revenues will be earmarked for the Renewal and Replacement Fund.

**Action Requested:** Motion to approve/disapprove

Attachment: Quote



Charles R. Underwood, Inc.  
2000 Boone Trail Rd.  
Sanford, NC 27330  
919.775.2463

March 11, 2022

Quote #DD-031122-01

Tim H. Holloman  
Lower Cape Fear Water and Sewer Authority  
1107 New Pointe Blvd, Suite 16  
Leland, NC 28451

RE: TMEIC MVe2 Variable Frequency Drive Critical Spares

Mr. Holloman,

We are pleased to provide you with this quote for the spare parts recommended by the manufacturer to be stocked for the recently purchased MVe2 drives.

The original sale of the currently installed drive was in response to an emergency replacement of the failed DBi5 model on site, as such spare parts were not quoted at that time. The warranty for this drive will expire in August 2022, it is our recommendation, as well as the manufacturer, that spare parts be stocked to avoid any issues with procurement times. The quoted lead time for these parts is 26 weeks. In communication with the manufacturer, CRU anticipates that this can be improved, and will do everything in our abilities to do so.

Please note that this single set of spare parts will satisfy the manufacturers recommendation for the currently purchased drives as well as any future MVe2 replacements of your current DBi5 models at the Kings Bluff Pump Station. Additional parts will only need to be purchased if they are installed in a drive. The pricing below includes the following.

#### **ITEM #1 – TMEIC 1750 HP MVe2 VFD Spare Parts**

- Reference attached TMEIC spare parts list.
  - All Spares quoted herein are defined by the manufacturer as “Critical Spares”. It is their recommendation that these parts be stocked for any drive not under warranty.
    - Only one set of spare parts is needed to cover multiple drives.
  - A complete spare parts list can be provided if requested. Only “Critical” Spare parts have been quoted here as an effort to mitigate cost

**TOTAL FOR ITEM #1: \$103,975.00 Plus Tax**

March 11, 2022

**Notes / Exceptions:**

- 1. Quoted lead time is 26 weeks.**
- 2. Pricing is valid for 30 days.**
- 3. No equipment, goods or services are included unless specifically mentioned herein.**
- 4. Price includes freight.**
- 5. Price excludes Taxes**

As always, we appreciate the opportunity to work with you. If we can be of further service, or if you have any questions, please contact us.

Best regards,

Derek Demers  
Sales Associate  
**Charles R. Underwood Inc.**  
919-935-4415  
[ddemers@crupumps.com](mailto:ddemers@crupumps.com)

**NB1 - 3**



**Lower Cape Fear Water & Sewer Authority**  
**Leland, North Carolina**

**BUDGET AMENDMENT #2**

**Fiscal Year 2021 - 2022**

**BE IT ORDAINED** by the Board of Directors of the Lower Cape Fear Water & Sewer Authority that the following amendments are made to the FY 2021-2022 Annual Budget Ordinances as follows:

**Section 1:** To amend the **Operating Revenue** the appropriations are to be changed as follows:

<b>Fund Balance Appropriated:</b>	<b>Increase</b>
2900– Fund Balance Appropriated	391,253.25
3004-01 Invista/Stephan Revenue	30,000.00
30006-01 Bladen Admin Revenue	32,000.00

To amend the **Operating Revenue** the appropriations are to be changed as follows:

<b>Enterprise Fund</b>	<b>Decrease</b>
2900– Enterprise Fund Appropriated	\$ 391,253.25

**Section 2:** To amend the **Operating Expenses** the appropriations are to be changed as follows:

<b>Operating Fund:</b>	<b>Increase</b>
7400-01 – Operating Capital Expense	\$ 391,253.25
4998-05- Transfer to R & R	62,000

**Section 3:** Copies of this Budget Amendment shall be furnished to the Budget Officer for direction in the carrying out of his duties.

Approved as to the availability of funds:

\_\_\_\_\_  
 Tim H. Holloman, Finance Officer

This Budget Amendment adopted this 11<sup>th</sup> day of April 2022.

\_\_\_\_\_  
 Charlie Rivenbark, Chairman

ATTEST:

\_\_\_\_\_  
 Harry Knight, Secretary

## **AGENDA ITEM**

To: CHAIRMAN LEONARD AND BOARD MEMBERS

From: TIM H. HOLLOMAN, EXECUTIVE DIRECTOR

Date: April 11, 2022

Re: Installation of a new Mitsubishi 24k btu mini split wall mount

Reviewed and approved as to form: MATTHEW A. NICHOLS, AUTHORITY ATTORNEY

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Background: The office/storage area in the original building at Kings Bluff has fallen into disrepair. We've replaced lighting and plan to redo the floor and paint the walls. The mini-split system is not functioning, and this new unit will bring that area back into operation and eliminate safety concerns.

The lowest cost to replace the mini-split system is \$5331.87. There are available funds in this year's budget to cover this work.

**Action Requested:** Motion to approve/disapprove

Attachment: Quotes



**Comfort Promised**



Date: 02/24/2022 Proposal Number: R1002242022060713-2  
 Name: Brunswick Court Public Utilities Consultant: Matt Childree  
 Site Address: 246 Private Rd Billing Address: 246 Private Rd  
 City: Riegelwood City: Riegelwood  
 State: NC State: NC  
 Phone: (910) 655-4799 Zip Code: 28456

### Zone 1

System Investment	
Term:	Rate: %
Investment Type:	Est Payment: \$
Credit Card	
Base System	\$5330.87
Optional Items Total:	\$0.00
Sales Tax 0%	\$0.00
System Total	\$5330.87
Initial Investment	\$0
Balance	\$5330.87
Net Investment After Credits & Rebate:	\$5330.87

Your Home



Components in Base System Investment		
Qty	Model #	Description
1	NTXSMT24A112	24000 BTU MITSUBISHI/FRANE OUTDOOR HEAT PUMP UNIT (18.0 SEER)
1	NTXWMT24A112	24000 BTU MITSUBISHI/FRANE INDOOR UNIT FOR HEAT PUMPS (18 SEER)
1	EXISTING	CONNECTING AC COIL TO EXISTING LINESET
1	ELEC-RECON-1-2	PACKAGE UNIT OR OUTDOOR UNIT AND AIR HANDLER FINAL ELECTRIC / EXISTING DISCONNECT - 2 CIRCUITS
1	BRUNSWICK COUNTY "ADD-ON" PERMIT	USED WHEN ADDING A NEW SYSTEM TO A HOME, SUCH AS THE ADDITION OF A MINI-SPLIT.
1	HP-DLMS-1	INSTALL HEAT PUMP AND NEW DUCTLESS MINI-SPLIT LEVEL 1

### Inclusions

- Ensures safety and insurability
- Quality assurance review
- Complete system start up
- Sealed connections for greater energy
- Ensure proper amount of freon in AC or HP
- 10 year parts only warranty
- Includes Permits.
- Installation to meet or exceed the Prevailing Codes.
- Evacuate refrigerant system, removes air and water

By signing this agreement I acknowledge that I have read and understand each page, including the terms and conditions.

Customer:

Date:

Presented By:

Date:

*Comfort Promised*



Date:	02/24/2022	Proposal Number:	R1002242022060713-2
Name:	Brunswick Count Public Utilities	Consultant:	Matt Childree
Site Address:	246 Private Rd	Billing Address:	246 Private Rd
City:	Riegelwood	City:	Riegelwood
State:	NC	State:	NC
Phone:	(910) 655-4799	Zip Code:	28456

**Proposal Notes**

NC LICENSE No. 13062

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders and will be executed only upon same, and will become an extra charge over and above the estimate. O'Brien Service Company is not responsible for any damage caused by environmental elements including condensating ductwork due to high humidity or extended runtimes. All agreements contingent upon strikes, accidents, or delays beyond control. Owner to carry fire, tornado, and other necessary insurance. Our workers are fully covered by Workmens Compensation Insurance. Our Company is covered by General Liability



**Installation Instructions**

Install a new mitsubishi 24k btu mini split wall mount.

By signing this agreement I acknowledge that I have read and understand each page, including the terms and conditions.

Customer:	Date:	Presented By:	Date:
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910-799-6611 - obrienservice.com - 3308 Enterprise Dr. Wilmington, NC 28405

**Comfort Promised**



Date:	02/24/2022	Proposal Number:	R1002242022060713-2
Name:	Brunswick Count Public Utilities	Consultant:	Matt Childree
Site Address:	246 Private Rd	Billing Address:	246 Private Rd
City:	Riegelwood	City:	Riegelwood
State:	NC	State:	NC
Phone:	(910) 655-4799	Zip Code:	28456

**Proposal Notes cont.**

Insurance. This proposal may be withdrawn by us if not accepted within 10 days. The amount of the discount for previous service calls will be determined by salesman with approval from the Sales Manager. All special terms financing will be offered during promotional periods ONLY. All credit approvals and installations must be completed within special terms financing period in order to receive the special financing. 50% Deposit required at point of sale and remaining 50% balance is due at the time of installation. OBrien Service Company is NOT responsible for rebates from Duke Energy.

\*ALL CANCELLED JOBS WILL BE ASSESSED A \$200 FEE. ADDITIONAL MATERIAL RESTOCKING FEES MAY BE ADDED AND WILL BE REVIEW ON A CASE BY CASE BASIS.

**DESIGN CRITERIA:**

Cooling - 75 degree indoor temperature with



Installation Instructions cont.

By signing this agreement I acknowledge that I have read and understand each page, including the terms and conditions.

Customer:

Date:

Presented By:

Date:

Comfort Promised



Proposal Notes cont.

91 degree outdoor temperature  
Heating - 70 degree indoor temperature with  
26 degree outdoor temperature



Date:	02/24/2022	Proposal Number:	R1002242022060713-2
Name:	Brunswick Count Public Utilities	Consultant:	Matt Childree
Site Address:	246 Private Rd	Billing Address:	246 Private Rd
City:	Riegelwood	City:	Riegelwood
State:	NC	State:	NC
Phone:	(910) 655-4799	Zip Code:	28456



Installation Instructions cont.

By signing this agreement I acknowledge that I have read and understand each page, including the terms and conditions.

Customer:	Date:	Presented By:	Date:
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**From:** [Jack Hogan](#)  
**To:** [ThollomanLcfwasa](#)  
**Subject:** FW: HVAC Quote  
**Date:** Thursday, March 10, 2022 4:04:26 PM

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-----Original Message-----

From: Jeff Pridgen <jeff@pridgencontractors.com>  
Sent: Thursday, March 3, 2022 7:53 AM  
To: Jack Hogan <Jack.Hogan@brunswickcountync.gov>  
Subject: HVAC Quote

CAUTION: This email originated from outside of Brunswick County Government. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jack Im waiting on a quote from Trane on the 20 Ton system , hopefully I will get it today.

The quote on the Ductless unit -

2 Ton Trane/Mitshubishi Heat Pump Mini split, Including Demo of all existing equipment and freon lines.

Total \$6225.00

Thanks Jeff Pridgen

## **AGENDA ITEM**

To: CHAIRMAN RIVENBARK AND BOARD MEMBERS

From: TIM H. HOLLOMAN, EXECUTIVE DIRECTOR

Date: April 11, 2022

Re: Resolution to Recognizing National Drinking Water Week

Reviewed and approved as to form: MATTHEW A. NICHOLS, AUTHORITY ATTORNEY

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Background: For more than 40 years, the American Water Works Association and its members have used Drinking Water Week as a unique opportunity for water professionals and the communities they serve to recognize water's vital role in our daily lives.

National Drinking Water Week is celebrated annually during the first whole week in May. This year's recognition will be May 1-7, 2022.

**Action Requested:** Motion to approve/disapprove Resolution.

## **Resolution to Recognizing National Drinking Water Week**

**WHEREAS** the Board of Directors for Lower Cape Fear Water & Sewer Authority (“the Authority”) wishes to provide and promote the importance of raw water to the region; and

**WHEREAS**, the Authority is a regional organization created to aid the development of a water supply system for its sponsoring member governments comprised of Bladen, Brunswick, Columbus, New Hanover, and Pender Counties, and the City of Wilmington; and

**WHEREAS** the Authority recognizes that water is our most valuable natural resource; and

**WHEREAS**, water is treated by our wholesale partners providing public health protection, fire protection; support for our economy and the quality of life we enjoy; and

**WHEREAS**, any measure of a successful society, low mortality rates, economic growth and diversity, productivity, and public safety are related to access to water; and

**WHEREAS** we are all stewards of the water infrastructure upon which future generations depend; and

**WHEREAS** the Authority’s Board of Directors calls upon the residents and businesses of our region and those further upriver to protect our source waters from pollution, to practice water conservation, and to get involved in local water issues.

**NOW, THEREFORE, BE IT RESOLVED**, by the Chairman and the Board of Directors for the Lower Cape Fear Water & Sewer Authority that the first full week in May is proclaimed as Drinking Water Week.

**THEREFORE, BE IT FURTHER RESOLVED**, that a copy of this resolution be recorded in the permanent minutes of this Board.

**Adopted this 11<sup>th</sup> day of April 2022.**

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**Charlie Rivenbark, Chairman**

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**Harry Knight, Secretary**

## **AGENDA ITEM**

**To:** CHAIRMAN RIVENBARK AND BOARD MEMBERS

**From:** TIM H. HOLLOMAN, EXECUTIVE DIRECTOR

**Date:** April 11, 2022

**Re:** Executive Director's Report

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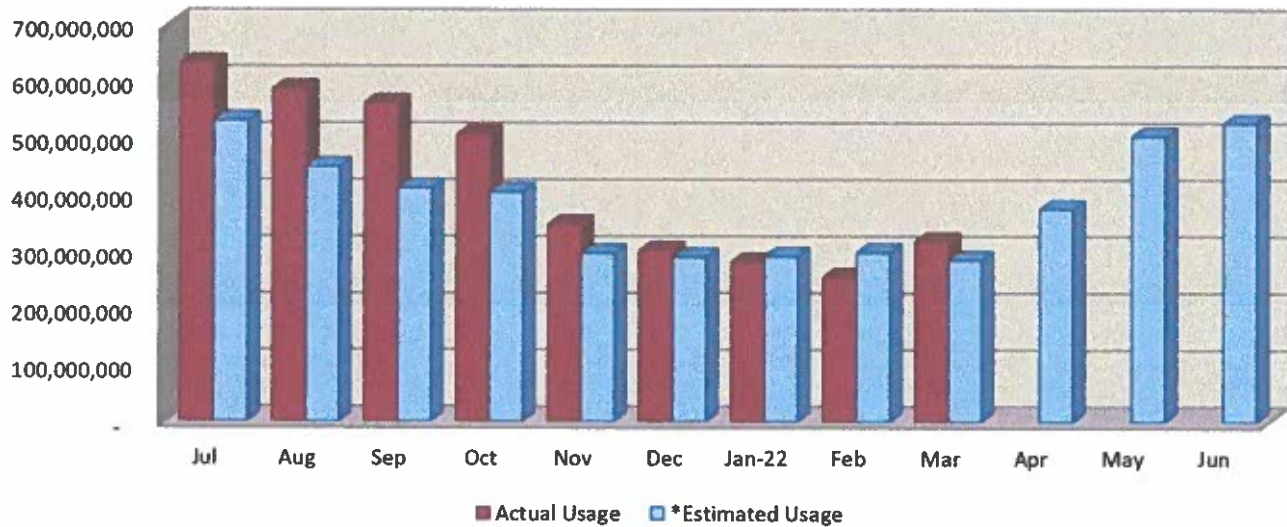
**EDR1** - Comments on Customers' Water Usage and Raw Water Revenue for Fiscal Year to Date Ending March 31, 2022

**EDR2** - Operating Budget Status, Ending February 28, 2022.

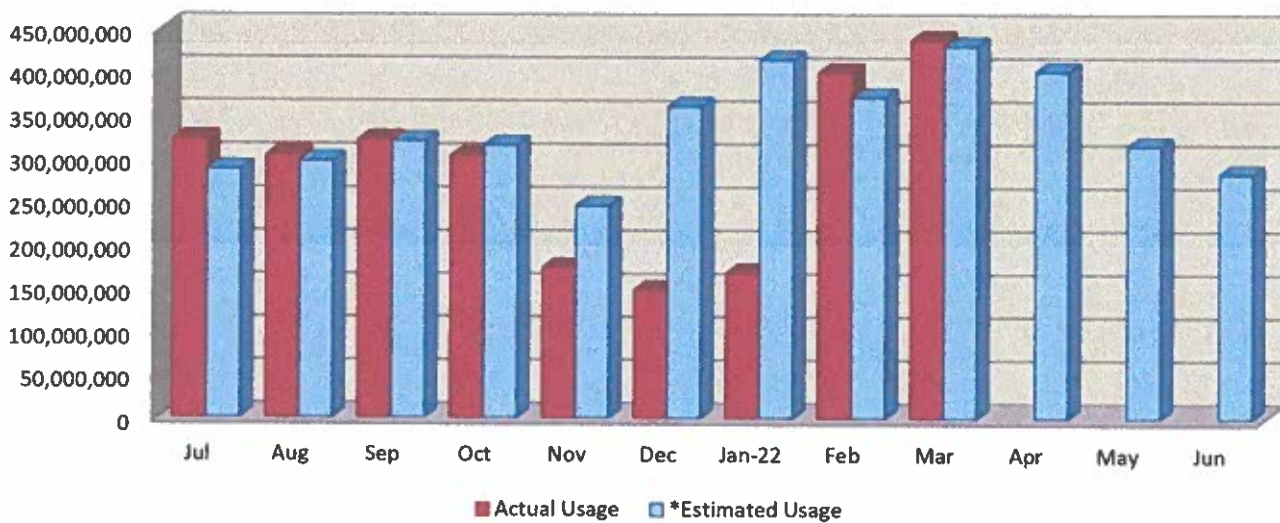
**EDR3** - Summary of Activities.

**Action Requested:** For information purposes

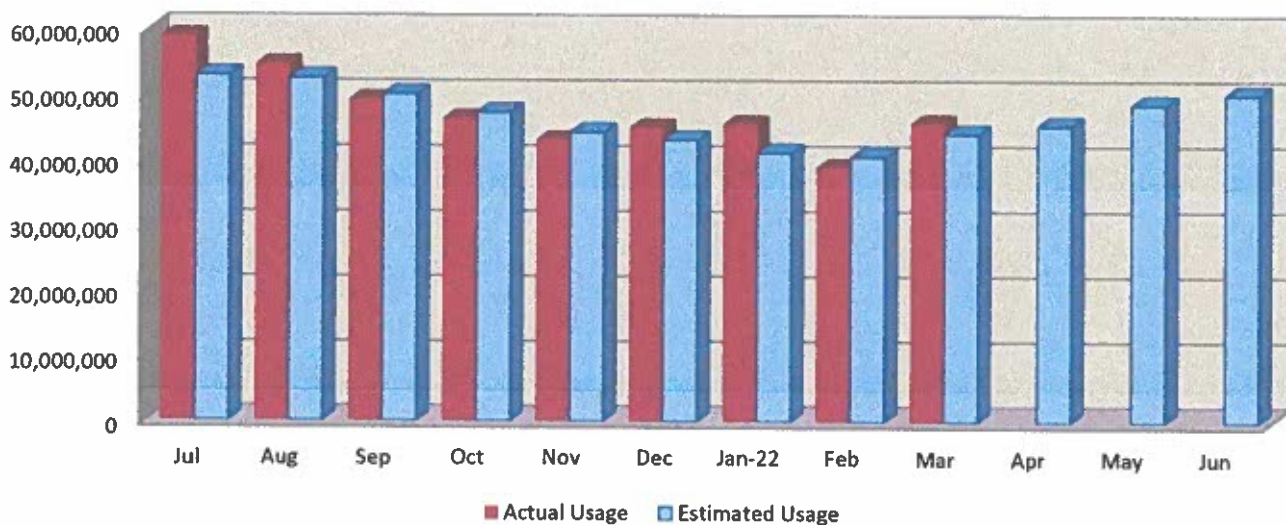
### Brunswick County Water Usage FY 21-22



### CFPUA Water Usage FY 21-22



### Pender County Water Usage FY 21-22



## OPERATING FUND BUDGET PERFORMANCE

Jul-1 through Feb 28

Income	Approved	Adjust/Amended	Jul 1- Feb 28	Jul 1- Feb 28	Jul 1- Feb 28	Budget As of 02/28/2022
	Annual Budget	Annual Budget	Kings Bluff	Bladen Bluffs	OF BUDGET	
<b>3000-01 - OPERATING REVENUE</b>						
3001-01 - 01 Bruns County Public Utility	1,491,553	1,491,553	1,145,058		1,145,058	77%
3002-01 - 01 CFPWA	1,296,405	1,296,405	707,326		707,326	55%
3003-01 - 01 Pender County	179,822	179,822	126,283		126,283	70%
3004-01 - 01 HWY 421 - Invista	40,000	40,000	63,333		63,333	158%
3005-01 - 01 Praxair, Inc	4,314	4,314	1,551		1,551	36%
3006-01 - 01 Bladen Bluffs Revenue	3,194,127	3,444,127		2,660,474	2,660,474	77%
Bladen Admin Reimb	94,302	94,302		84,668	84,668	90%
3007-01 - Sales Tax Refund Revenue	70,000	80,000		55,833	55,833	62%
<b>Total 3000-01 - OPERATING REVENUE</b>	<b>6,370,523</b>	<b>6,640,523</b>	<b>2,043,550</b>	<b>2,800,976</b>	<b>4,844,525</b>	<b>73%</b>
<b>3100-00 - OF NONOPERATING REVENUE</b>						
3120-00 - Revenue-Other						
Interest & Investment Revenue	2,000	2,000	255		255	13%
FEMA Reimbursement	0	0	0		0	
Refunds / Insurance Proceeds/ Other	0	0	600		600	
3156-00 - Rental Income	0	0	10,415		10,415	
3900-01 R&R Fund Appropriated	0	0	0		0	
2900-00 Fund Balance	0	0	0		0	
<b>Total 3100-00 - OF NONOPERATING REVENUE</b>	<b>2,000</b>	<b>2,000</b>	<b>11,269</b>	<b>0</b>	<b>11,269</b>	<b>563%</b>
<b>Total Income</b>	<b>6,372,523</b>	<b>6,642,523</b>	<b>2,054,819</b>	<b>2,800,976</b>	<b>4,855,794</b>	<b>73%</b>
<b>Expense</b>						
<b>4000-01 - ADMINISTRATION EXPENDITURES</b>						
4001-01 - Salary - gross	168,610	168,610	74,716	33,722	108,438	64%
4010-01 - Per Diem= mileage+per diem pay	62,500	62,500	23,334	12,524	35,858	57%
4012-01 - Vehicle Allowance	5,200	5,200	2,360	1,040	3,400	65%
4070-02 - Phone Allowance	520	520	236	104	340	65%
4015-01 - Payroll Taxes	17,967	17,967	7,497	3,599	11,096	62%
4029-01 - Retirement Employer's Part	18,379	18,379	8,719	3,676	12,395	67%
4035-01 - 401K Employer PD Contribution	4,758	4,758	2,221	952	3,172	67%
4036-01 - Payroll Processing Exp	2,900	2,900	1,782		1,782	61%
4038-01 - Insurance Group	40,910	40,910	15,522	7,252	22,774	56%
4039-01 - Insurance, Property	87,000	87,000	69,879	17,400	87,279	100%
4046-00 Professional Services General	15,000	15,000	0	0	0	0%
4046-01 - Attorney	30,000	27,900	12,488		12,488	45%
4046-02 - Auditor	9,000	9,000	5,400	2,800	8,200	91%
4046-03 - Engineer	55,000	50,000	12,267	0	12,267	25%
4049-01 Information Technology	10,000	13,800	5,830	0	5,830	42%
4055-01 - Office Maint/Repair	17,000	22,000	9,153		9,153	42%
4058-01 - Office Utilities	7,000	3,000	1,266		1,266	43%
4059-01 - Office Expense	35,000	28,300	9,457		9,457	36%
4062-01 - Office Equipment	0	10,000	6,627		6,627	66%
4064-01 - Printing & Advertising	0	2,000	688		688	34%
4065-01 - Telephone and Internet	0	3,200	1,535		1,535	48%
4070-01 - Travel & Training	17,500	21,800	17,427		17,427	80%
4080-01 - Miscellaneous Expenses	15,000	23,000	13,357		13,357	58%
<b>Total 4000-01 - ADMINISTRATION EXPENDITURES</b>	<b>619,244</b>	<b>635,744</b>	<b>301,791</b>	<b>83,068</b>	<b>384,859</b>	<b>61%</b>
<b>4500-01 - OPERATING EXPENDITURES</b>						
4501-00 - Sales Tax Expense - Other	70,000	110,000		75,464	75,464	69%
4510-01 - Bladen Bluffs Expenses	1,889,330	2,139,330		1,571,779	1,571,779	73%
4520-01 - Utilities-Energy Pump Station	789,687	753,167	343,362		343,362	46%
4530-01 - Kings Bluff O&M Expenses	453,809	453,809	225,727		225,727	50%
4535-01 - Kings Bluff Hurricane Other FEMA			0		0	0%
4543-01 - Series 2012 Bond Principal (ST)	601,443	601,443	0		0	0%
4544-01 - Series 2012 Bond Interest (ST)	11,730	11,730	5,864		5,864	50%
4545-01 - Series 2010 Bond Principal (BB)	850,000	850,000		850,000	850,000	100%
4546-01 - Series 2010 Bond Interest (BB)	297,500	297,500		10,752	10,752	4%
7400-01 - Operating Capital Expense	325,000	325,000	313,120		313,120	96%
4998-05- Transfer to R&R- KB R&R Expense	75,000	75,000		0	0	0%
2041-01- 421 Relocation NHC Loan Principal	390,000	390,000		390,000	390,000	100%
<b>Total 4500-01 - OPERATING EXPENDITURES</b>	<b>5,753,279</b>	<b>6,006,779</b>	<b>574,954</b>	<b>2,897,995</b>	<b>3,786,068</b>	<b>63%</b>
<b>Total Expense</b>	<b>6,372,523</b>	<b>6,642,523</b>	<b>876,745</b>	<b>2,881,063</b>	<b>4,170,928</b>	<b>63%</b>

## Executive Director Highlighted Activities:

- Received approval for the 2022 Audit Contract from the State Treasurer's office
- Working with McKim and Creed to complete documents and resolutions necessary to complete the spring application deadlines.
- Attend Cape Fear Community College Career Fair, representing opportunities in the Water Utility Field.
- Met with partners to continue planning for the May 20, 2022, dedication.
- Ongoing work with CFPUA and Partners to solicit funding for the next 10-mile section to parallel the existing 48" line leaving the Northwest plant and prepared resolutions for adoption by member entities.
- Review cyber security information from Brunswick County Utilities and CFPUA
- Attended County meetings to seek approval for the 10-mile parallel line resolution.
- Continue work with Kings Bluff staff to clean and renovate the former office area of the original plant site.
- Met with Barron and Budd legal representatives regarding ongoing lawsuit with Chemours
- Attended COG Annual Meeting

## **AGENDA ITEM**

To: CHAIRMAN RIVENBARK AND BOARD MEMBERS

From: TIM H. HOLLOMAN, EXECUTIVE DIRECTOR

Date: April 11, 2022

Re: Closed Session in Accordance with NCGS§143-318.11(a)(3) and (6) to preserve the Authority's Attorney Client Privilege and for Personnel Matters respectively.

Reviewed and Approved as to form: MATTHEW A. NICHOLS, AUTHORITY ATTORNEY

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A Closed Session is required in accordance with NCGS§143-318.11(3) and (6) to preserve the Authority's Attorney Client Privilege and for Personnel Matters respectively.

A motion is made by \_\_\_\_\_ to go into a closed session in accordance with North Carolina General Statute Section 143-318.11(3) and (6).

The motion is seconded by \_\_\_\_\_.

### **Closed Session**

A motion is made by \_\_\_\_\_ to return to open session.

The motion is seconded by \_\_\_\_\_.