



## **AGENDA**

**Lower Cape Fear Water & Sewer Authority  
1107 New Pointe Boulevard, Suite # 17, Leland, North Carolina  
9:00 a.m. – Regular Monthly Board Meeting  
September 13, 2021**

**MEETING CALL TO ORDER:** Chairman Leonard

**INVOCATION**

**PLEDGE OF ALLEGIANCE**

**APPROVAL OF CONSENT AGENDA**

- C1 - Minutes of August 9, 2021 Regular Board Meeting
- C2 - Kings Bluff Monthly Operations and Maintenance Report
- C3 - Bladen Bluffs Monthly Operations and Maintenance Reports
- C4 - Line Item Adjustment
- C5 - Resolution in Recognition of National Source Water Protection Week

**OLD BUSINESS**

OB1-Review of Demand Response Automation Response-Cost Benefit Analysis

**ENGINEER'S COMMENTS**

**ATTORNEY COMMENTS**

**EXECUTIVE DIRECTOR REPORT**

- EDR1–Comments on Customers' Water Usage and Raw Water Revenue for Fiscal Year to Date Ending August 31, 2021
- EDR2–Operating Budget Status, Ending July 31, 2021.
- EDR3–Summary of Activities

**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, October 11 at 9:00 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

August 9, 2021

Chairman Leonard called to order the Authority meeting scheduled on August 9, 2021, 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 Leonard:**

**Present:** Norwood Blanchard, Patrick DeVane, Wayne Edge, Harry Knight, Al Leonard, Al Milliken, Jackie Newton, Charlie Rivenbark, Bill Saffo, Chris Smith, Bill Sue, Frank Williams, and Rob Zapple

**Present by Virtual Attendance:** Phil Norris

**Absent:** None

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

**Guests Present:** Eric Gardner, Wilson Hudspeth, and Glen Walker

**Guests Virtual Attendance:** Carel Vandermeijden, Matt Hourihan, John Nichols, Kenneth Waldrop, Heidi Cox, and John Malone

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

**APPROVAL OF CONSENT AGENDA**

- C1 - Minutes of Regular Board Meeting July 12, 2021**
- C2 - Kings Bluff Monthly Operations and Maintenance**
- C3 - Bladen Bluffs Monthly Operations and Maintenance Reports**

**Motion:** Director Williams **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			
Al Milliken	X			
Charlie Rivenbark	X			
Bill Saffo	X			
Chris Smith	X			
Bill Sue	X			
Frank Williams	X			
Rob Zapple	X			
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**OLD BUSINESS**

**OBI- Review of the Demand Response Automation with a Presentation from Duke Energy by Eric Gardner and Wilson Hudspeth.**

## ENGINEER'S COMMENTS

Jess Powell gave an update on the 54-inch parallel raw water main. There is one line item in the project cost for subgrade stabilization stone. McKim and Creed allotted twelve inches of stone under the pipe, and throughout the project, they have not had to use that line item. That is a total of 1.1 million dollars not anticipated to be needed. Scheduled completion has not changed and is set for January 2022. The new 54-inch pipeline from the pumping station to the ground tank is complete, except for the portion that floated on Rattle Snake Branch. Garney determined the soil did not achieve sufficient cover. The contractor brought in fill dirt to build up the ground surface area, then installed the pipeline, and then came back to remove the additional fill dirt. McKim and Creed designed five feet of cover in this area. Garney completed another surveyor check of the pipeline that floated and determined they only achieved three feet of coverage. Garney is working on installing access to the area to remove the damaged portion of the pipe and replace it. Director Milliken wanted to confirm that Garney will be reusing the undamaged part of the pipeline. Jess advised Garney is only replacing the bent/damaged portion of the pipeline. Director Newton wanted to know if McKim and Creed had signed off on the work. Jess stated they have not signed off because construction is still ongoing. Director Zapple wanted to know what happened with the quality control measures for this portion of the pipeline. Jess advised they did not have survey-grade equipment on site; however, the construction observer could have seen that visually it was not five feet. Also, Garney should have seen it when they did the field test of this area. Director Zapple wanted to know if it will have any financial impact on LCFWASA. Jess advised Garney is covering any finances for the repair/replacement of the pipeline that floated. After Garney completes the replacement, they will begin schedule one of testing the pipeline, doing cleanup, and seeding the right away.

## ATTORNEY COMMENTS

Matthew Nichols spoke to Stephen Johnston from Baron and Budd, who represents LCFWAS in litigation against Chemours Company FC LLC, The Chemours and Company, and the Chemours Company. That litigation is pending in the US District Court and District and the District of North Carolina. The Authority is the plaintiff along with CFPUA, Brunswick County, and the town of Wrightsville Beach. Mr. Johnston stated an amended scheduling order was entered in the case. The new amended deadline for fact discovery to conclude is June 30, 2022. Mr. Johnson advised there are three tracks of cases: the public authority government track, which we are a part of, the second track is several individual plaintiffs, and the third track is a class action. Director Newton wanted to know if Baron and Budd would report to us regarding the written discovery. Mr. Nichols advised Baron and Budd have a large volume of documents they are looking over. He will talk to Mr. Johnston about a summary update for the Board via a phone or zoom call. Director Newton wanted to know when the three litigation maps converge, will there be one trial for each separate track or joined together. Mr. Nichols stated the class action track is ahead of the Authority's case. Director Zapple wanted to know who is financing Baron and Budd. Executive Director Holloman advised it is on contingency, and LCFWASA has a minor portion. Director Newton and Zapple would like Mr. Nichols to request periodic summary reports from Baron and Budd. Mr. Nichols will contact Mr. Johnston to set up the periodic summary reports. Director Milliken questioned if there was an update on the manufactured home. Mr. Nichols advised we are waiting for comments back on the draft agreement.

## EXECUTIVE DIRECTOR REPORT

### EDR1 – Comments on Customers' Water Usage and Raw Water Revenue for Fiscal Year to Date Ending July 31, 2021

Executive Director Holloman reported that during the Month of July 2021, Brunswick County, CFPUA, and Pender County were all above projections. Monthly revenue was up as well.

### EDR3 – Summary of Activities

Executive Director Holloman informed the board that he worked with Brunswick County, Underwood Pump, and others to expedite the emergency replacement of VFD that was tested and put into service this past Thursday. Continue reviewing of "Take or Pay" with Matt Nichols. The computer server and new phone were installed after the July board meeting.

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

Director Sue wants to know the variable cost to run the generators versus the Demand Response Automation savings. Director Smith would like to schedule a trip to visit the 54-inch pipeline. Chairman Leonard wanted advice on guidance for COVID measures for the Authority and curtailing public attendance. Director Williams advised following Brunswick County Government. Chairman Leonard agreed with LCFWASA to follow Brunswick County Government policy.

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**PUBLIC COMMENT**

No comment

**ADJOURNMENT**

There being no further business, Chairman Leonard adjourned the meeting at 10:19 a.m.

Respectfully Submitted:

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Norwood Blanchard, 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:** 8/31/2021

**SUBJECT:** Monthly maintenance report for August 2021

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Mr. Holloman,

The Maintenance and Operations of the king's bluff facility for the month of August was 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 ran and tested weekly and verified standby ready.

KB personnel completed all locates issued by the 811 system.

KB personnel and Brunswick Co. I&C dept. worked with Sanford Electric on removal of the original # 4 VFD that failed to make area for the new # 4 VFD.

KB personnel along with Brunswick Co. I&C dept. worked with TMEIC, Underwood and Sanford Electrical contractors on the startup of the new # 4 VFD,

# 4 VFD put in service on 8/4/21.

KB personnel replaced door and side panel on # 4 VFD that was damaged during transport from the factory.

KB personnel repaired coolant leak on # 2 EMD oil cooler.

KB personnel prepped and painted trailer to make into a fuel haul trailer.

KB personnel removed the 900-gallon oil tank located at the generator building to use as a fuel tank and give the ability to transport fuel to the raw tank and other locations as needed in storms, hurricanes where power has been lost and the ability to rotate fuel supplies.

KB repaired wiring harness on # 2 booster pump that had prevented it from cranking and running.

KB personnel repaired water leak at Authority garage (Big Red Shed)

KB personnel inspected and tested # 4 Val-Matic actuator valve that was found to be leaking back into the wet well.

Underwood Pump Co. completed testing of the # 4 motor and wiring and all systems checked and determined to be approved for operation.

Mc Duffie Pest Control completed quarterly spraying and treatment of the pump station, office area and generator building.

Thank You,  
Jack Hogan  
Kings Bluff Pump Station

# Smithfield®

To: Tim Holloman - LCFWASA

From: James Kern – Bladen Bluffs SWTP ORC

Date: 9/3/21

Subject: August 2021 Operations

During the month of August, Bladen Bluffs SWTP operated a total of 18 days, treating 41.12 million gallons of water.

We used:

25,557 lbs. of aluminum sulfate (Alum)

7,700 lbs. of sodium hydroxide (Caustic)

1,456 lbs. of sodium hypochlorite (2,924 gallons of 6% Chlorine Bleach)

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

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

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

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

## Bladen Bluffs SWTP Maintenance Report

Date: 9/3/2021

### ISSUE:

### PLAN OF ACTION:

Air on finished water line (from GAC)	Replacing air relief valves on eff. line
Running spare cl2 lines to settled/finished	Getting quotes
Fire system supply redesign	New Contact at Crawford - Updating
Sump pump check valve needs replacement	Scheduled repair
Chlorine Transfer Pump #1 NA	Ordering New
Chlorine leak	FIXED
Parking Lot needs to be resealed/painted	Getting quotes
Maintenance shop AC not working	FIXED
Exhaust fan rattling	FIXED



**CONSENT AGENDA (CA-4)**

**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

<b>Operating Fund:</b>	<b>Decrease</b>	<b>Increase</b>	<b>Budget Amount as of 6/30/22</b>
<b>REVENUE</b>			
<b>EXPENSES</b>			
4062-01 Office Equipment		\$ 2,500	\$ 2,500
4064-01 Printing and Advertising		\$ 500	\$ 500
4065-01 Telephone		\$ 1,200	\$ 1,200
4059-01 Office Expense	\$(4,200)		
<b>Total</b>	<b>\$(4,200)</b>	<b>\$4,200</b>	<b>\$ 6,372,523</b>



**Resolution in Recognition of  
National Source Water Protection Week**

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

**WHEREAS**, the health, prosperity, and quality of life of the Lower Cape Fear Region citizens and communities depend on a reliable supply of safe, high-quality drinking water;

**WHEREAS**, protecting our drinking water is essential to preserve our health and economy and that of future generations;

**WHEREAS**, we strive to build opportunities and work together to ensure clean, safe source water for all;

**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**, Residents and Businesses of the Lower Cape Fear Region are encouraged to recognize this precious resource and help conserve the watersheds that are the source of our water, protect our shared water resources from pollution, practice water conservation, become involved in local water issues, and plan to protect water for future community health and economic vitality;

**THEREFORE, BE IT RESOLVED**, by the Chairman and the Board of Directors for the Lower Cape Fear Water & Sewer Authority that September 26th to October 2nd, 2021 is proclaimed as Source Water Protection Week

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

**Adopted this 13th day of September 2021.**

**NEW BUSINESS (OB-1)****Lower Cape Fear Water & Sewer  
Authority**

## **AGENDA ITEM**

**To:** CHAIRMAN LEONARD AND BOARD MEMBERS

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

**Date:** 9/13/2021

**Re:** Demand Automation Response-Cost Benefit Analysis

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

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**Background:** The Authority has been participating in this program since November 8th, 2010 when the Authority rebuilt the generators and purchased three new vertical turbine pumps. The initial agreement was for five years, with renewal every two years beyond that.

The Authority receives a monthly base credit of \$5,312.50 for just participating, which is \$63,750 annually. In addition, we receive a kilowatt credit based on usage, and the total for the FY 20-21 was \$77,688.74. Also, if the generators are activated, we received a credit, and with one activation in July 2020, we received a credit of \$10,087.98. The total credit for participating was \$151,526.72.

We are required to participate in three activations or less if Duke notifies the Authority for fewer than three. If we miss two notifications in a row, we are removed from the program for one year.

Director Sue asked for an analysis of the expenses of generator operation in comparison to the credits from the DRA. McKim & Creed performed a similar analysis and presented in February of 2019 and have revised it to reflect actuals realized from participation.

**Action Requested:** None

# Lower Cape Fear Water & Sewer Authority Demand Response Automation **Cost Benefit Analysis**



Board of Directors Meeting  
September 13, 2021





## General DRA Program Information

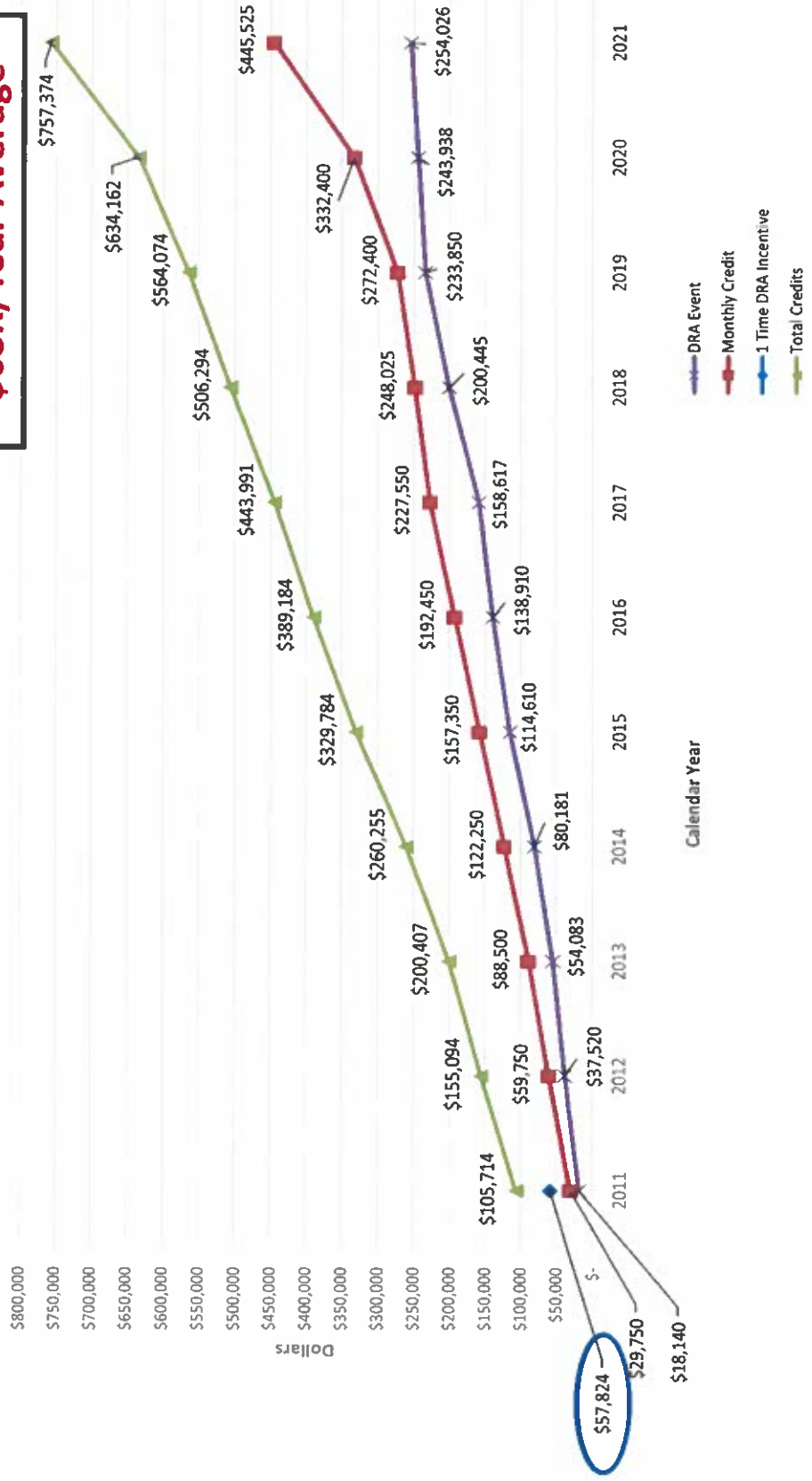
- \$5,312.50 Monthly Credit (\$63,750 Annual)
- Minimum 3 “Curtailment Events” Per Year
- Curtailment Credit Varies Based on Event



# DRA Program Credits Profile

Annual and Cumulative DRA Credit - Historical

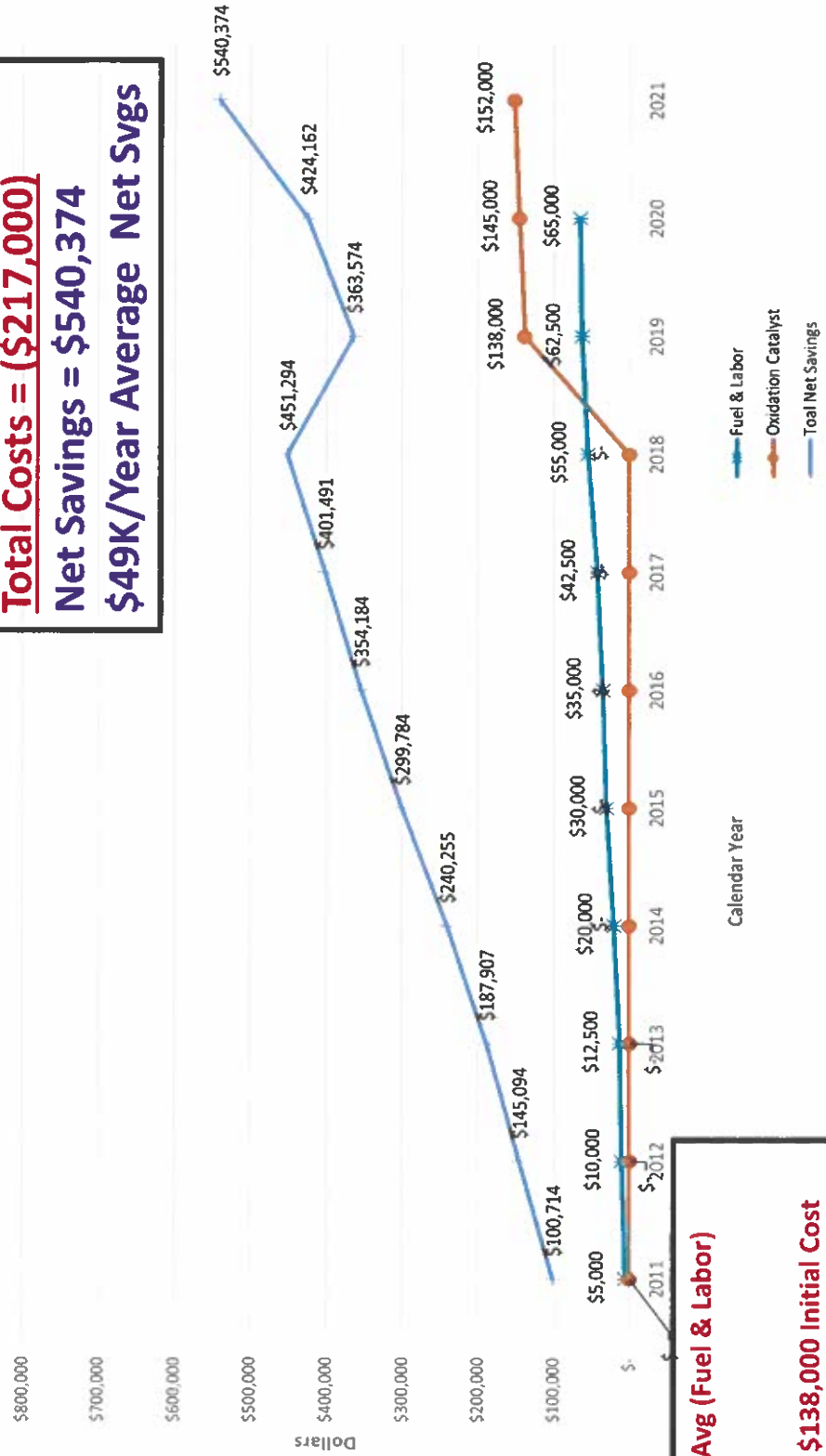
**Total Credits \$757,374**  
**\$68K/Year Average**



# Net Savings Summary

Costs & Expenditures & Total Net Savings

**Total Credits = \$757,374**  
**Total Costs = (\$217,000)**  
**Net Savings = \$540,374**  
**\$49K/Year Average Net Svgs**



**DRA Event = \$2,500 Avg (Fuel & Labor)**  
**26 Events to Date**  
**Oxidation Catalyst = \$138,000 Initial Cost**  
**\$7,000/Year Avg Monitoring (Power Secure)**  
**Recoup +/- 2023**



## Non-Economic Factors

- Practice Makes Perfect...Non-DRA Events
- Mechanical Wear on Generators
- Labor & Fuel Costs

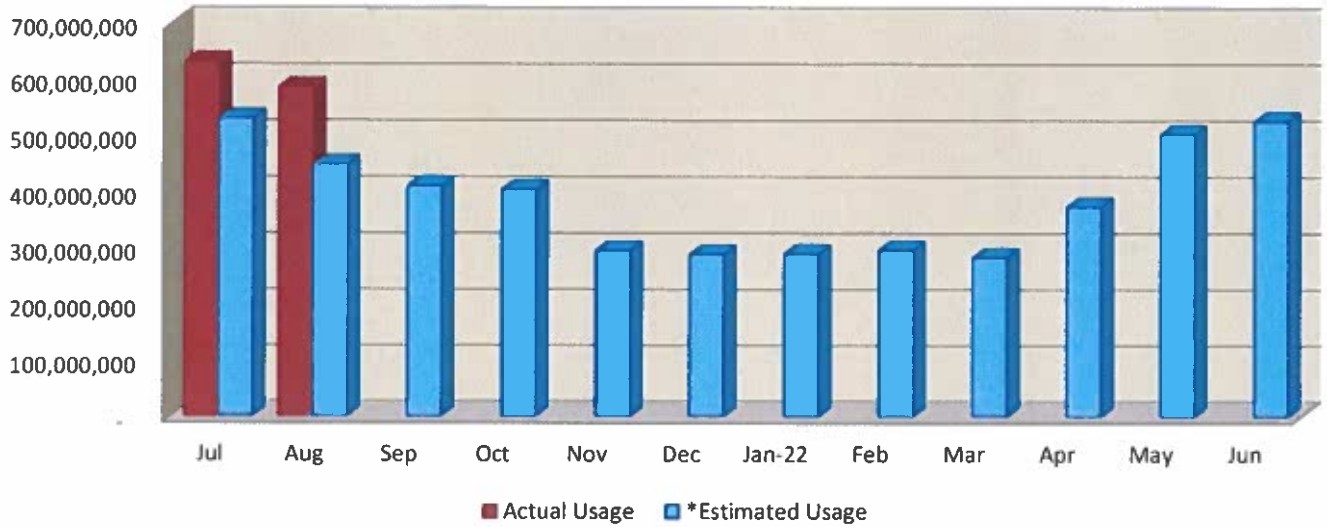




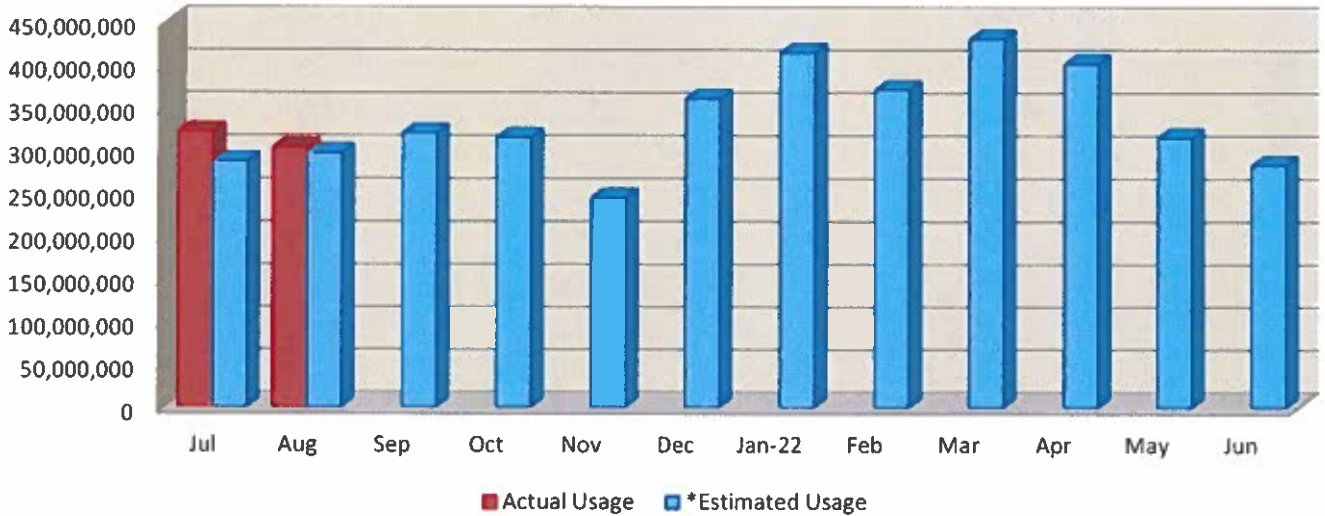
# Questions?



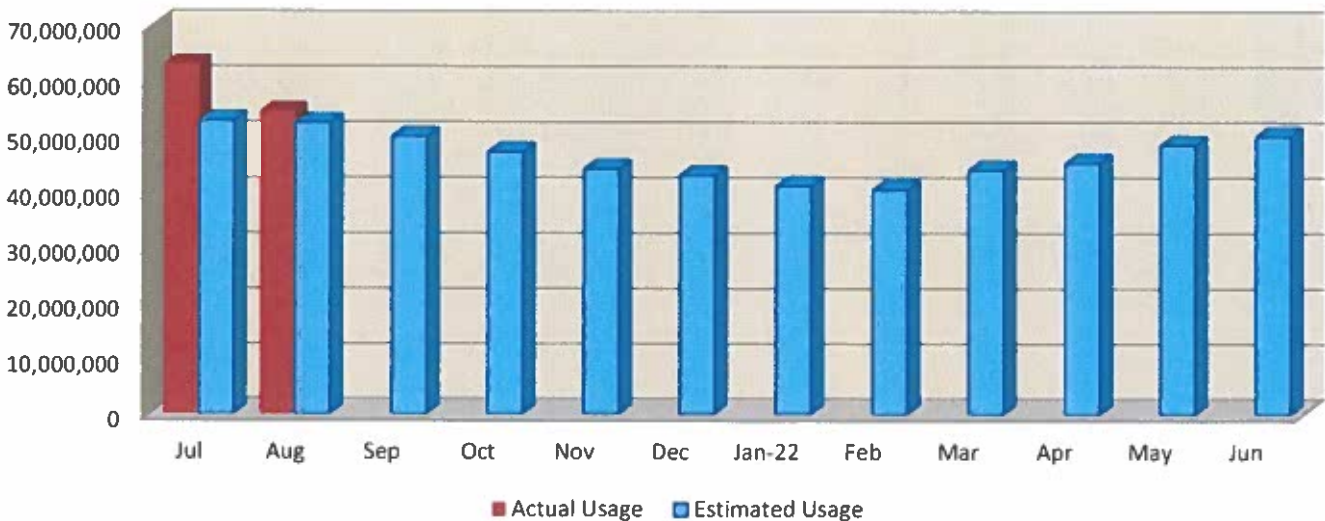
### Brunswick County Water Usage FY 21-22



### CFPUA Water Usage FY 21-22



### Pender County Water Usage FY 21-22



OPERATING FUND BUDGET PERFORMANCE

Jul-1 through Jul-31

Income	Approved Annual Budget	Jul 1- Jul 31	Jul 1- Jul 31	Jul 1- Jul 31	Budget As of 7/31/21
		Kings Bluff	Bladen Bluffs	OF BUDGET	
<b>3000-01 - OPERATING REVENUE</b>					
3001-01 - 01 Bruns County Public Utility	1,491,553	208,410		208,410	14%
3002-01 - 01 CFPUA	1,296,405	106,399		106,399	8%
3003-01 - 01 Pender County	179,822	20,864		20,864	12%
3004-01 - 01 HWY 421 - Invista	40,000	5,028		5,028	13%
3005-01 - 01 Praxair, Inc	4,314	253		253	6%
3006-01 - 01 Bladen Bluffs Revenue	3,194,127		224,265	224,265	7%
Bladen Admin Reimb	94,302		10,584	10,584	11%
3007-01 - Sales Tax Refund Revenue	70,000		0	0	0%
<b>Total 3000-01 - OPERATING REVENUE</b>	<b>6,370,523</b>	<b>340,953</b>	<b>234,849</b>	<b>575,802</b>	<b>9%</b>
<b>3100-00 - OF NONOPERATING REVENUE</b>					
3120-00 - Revenue-Other					
Interest & Investment Revenue	2,000	0		0	0%
FEMA Reimbursement	0	0		0	0%
Refunds / Insurance Proceeds/ Other	0	0		0	0%
3156-00 - Rental Income	0	1,196		1,196	
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>1,196</b>	<b>0</b>	<b>1,196</b>	<b>60%</b>
<b>Total Income</b>	<b>6,372,523</b>	<b>342,149</b>	<b>234,849</b>	<b>576,998</b>	<b>9%</b>
<b>Expense</b>					
<b>4000-01 - ADMINISTRATION EXPENDITURES</b>					
4001-01 - Salary - gross	168,610	9,462	4,215	13,677	8%
4010-01 - Per Diem= mileage+per diem pay	62,500	2,784	1,565	4,350	7%
4012-01 - Vehicle Allowance	5,200	270	130	400	8%
4070-02 - Phone Allowance	520	27	13	40	8%
4015-01 - Payroll Taxes	17,967	931	450	1,381	8%
4029-01 - Retirement Employer's Part	18,379	1,083	459	1,542	8%
4036-01 - 401K Employer PD Contribution	4,758	278	119	397	8%
4038-01 - Payroll Processing Exp	2,900	168		168	6%
4038-01 - Insurance Group	40,910	1,940	907	2,847	7%
4039-01 - Insurance, Property	87,000	84,703	2,175	86,878	100%
4046-00 Professional Services General	15,000	0	0	0	0%
4046-01 - Attorney	30,000	0		0	0%
4046-02 - Auditor	9,000	1,200	2,800	4,000	44%
4046-03 - Engineer	55,000	0	0	0	0%
4049-01 Information Technology	10,000	0	0	0	0%
4055-01 - Office Maint/Repair	17,000	0		0	0%
4058-01 Office Utilities	7,000	0		0	0%
4059-01 Office Expense	30,800	560		560	2%
4082-01 Office Equipment	2,500	570		570	23%
4064-01 Printing & Advertising	500	0		0	0%
4065-01 Telephone and Internet	1,200	87		87	7%
4070-01 - Travel & Training	17,500	1,665		1,665	10%
4080-01 - Miscellaneous Expenses	15,000	3,714		3,714	25%
<b>Total 4000-01 - ADMINISTRATION EXPENDITURES</b>	<b>619,244</b>	<b>109,441</b>	<b>12,834</b>	<b>122,275</b>	<b>20%</b>
<b>4500-01 - OPERATING EXPENDITURES</b>					
4501-00 - Sales Tax Expense - Other	70,000		3,506	3,506	5%
4510-01 - Bladen Bluffs Expenses	1,889,330		159,882	159,882	8%
4520-01 - Utilities-Energy Pump Station	789,667	33,205		33,205	4%
4530-01 - Kings Bluff O&M Expenses	453,609	3,383		3,383	1%
4535-01 Kings Bluff Hurricane Other FEMA		0		0	
4543-01 - Series 2012 Bond Principal (ST)	601,443	0		0	0%
4544-01 - Series 2012 Bond Interest (ST)	11,730	4,020		4,020	34%
4546-01 - Series 2010 Bond Principal (BB)	850,000		0	0	0%
4548-01 - Series 2010 Bond Interest (BB)	297,500		745	745	0%
Operating Capital Expense	325,000		0	0	0%
4988-05- Transfer to R&R- KB R&R Expense	75,000		0	0	0%
2041-01- 421 Relocation NHC Loan Principal	390,000		0	0	0%
<b>Total 4500-01 - OPERATING EXPENDITURES</b>	<b>5,753,279</b>	<b>40,609</b>	<b>164,133</b>	<b>204,740</b>	<b>4%</b>
<b>Total Expense</b>	<b>6,372,523</b>	<b>150,049</b>	<b>176,966</b>	<b>327,015</b>	<b>5%</b>

## Executive Director Highlighted Activities:

- Continued working with partners and Engineers on revising the Strategic/Capital Improvement Plan-Long Range Planning Committee to be scheduled for November to review recommendations
- Take or Pay Draft discussions with Partners to be held on September 14, 2021
- Worked with McKim & Creed to schedule Kings Bluff and Bladen Bluffs Annual Inspections.
- Presented 50<sup>th</sup> Anniversary Plaques to Bladen, City of Wilmington, New Hanover County and Pender County to date.