



EXHIBIT 3: DRAPER ADEN ASSOCIATES ENGINEER REPORT

REPORT

**FAIR VALUE APPRAISAL OF THE
WATER SYSTEM IN CARTERET COUNTY**

Carteret County, NC
Laurel Road / Merrimon Water Systems

UPDATE TO PRESENT VALUE OF WATER SYSTEM

December 2021
Revised March 2022

Prepared by:



Draper Aden Associates

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Background

Carteret County owns and operates two groundwater wells for water supply. The first well is located just East of Sowers Drive on Laurel Road, Beaufort, NC 28516, and the extracted groundwater is treated at the onsite Laurel Road Water Treatment Plant (WTP) before is it pumped to three (3) elevated storage tanks for distribution within the community. The system serves approximately 1,226 customers. The County also owns and operates a small water system known as the Merrimon Water System, approximately 20 miles north of Laurel Rd and Merrimon Rd intersection. The water system consists of the Jonaquins Creek Well and an above-ground water storage tank, and it serves approximately 27 customers. (The attached Appendix A system map further details the layout and location of the system and components.)

Draper Aden performed a water system feasibility study in 2019 to look at a merger with a local municipality, which established a monetary value for the County's water system assets, among other conclusions. This document is meant to update that number to a more current value. The original report can be found in Appendix B.

Assumptions / Limitations

In order to assess the changes to the value of the water systems owned by Carteret County, the following was assumed:

- Conditions of Carteret County's water system assets stated in the 2019 Feasibility Study have not significantly changed and remains an accurate depiction of current conditions.
- Book Value approach was used in estimating the value of fixed assets. Straight Line Depreciation was used to estimate depreciated value of water system assets. For the purpose of estimation, the salvage value of each system component was assumed to be zero dollars (\$0).
- The 2019 analysis for the projected 2020 fiscal budget is accurate to current financial conditions; an updated analysis for 2020 and 2021 budgets and expenses was not performed.
- To account for inflation since the 2019 feasibility study, several present book values which were estimated in the 2019 report have been increased by 5%.



Results / Conclusions

The water system assets owned by Carteret County have an estimated value of approximately \$12.7 million. A detailed breakdown of this value can be found in Tables 1 and 2.

However, if the water system assets were to be replaced in full today, that number would need to be increased significantly due to rising construction costs, particularly over the past few years. The estimated replacement cost for the Carteret County water system assets is \$24.8 million. A detailed cost for replacement of the water system can be found in Table 3.

The remainder of the major findings and recommendations reported in the 2019 feasibility study hold true.

Attachments:

Table 1: Estimated Book Value of Carteret County Water System

Table 2: Present Book Value of Carteret County Water System

Table 3: Estimated Replacement Cost for Water System Assets

Appendix A: Figure 1 Carteret County Water System Map

Appendix B: 2019 Feasibility Study for Water System Merger

Update to Present Value of Water System
 December 2021
 Revised March 2022
 Carteret County, NC

Table 1. Estimated Book Value of Carteret County Water System

Assets	Date of Acquisition	Design Life (yrs)	Historical Cost (\$)	Total Useful life (months)	Net Amount to Be Depreciated (\$)	Accumulated Depreciation (\$)	Current Depreciation (\$)	Total Depreciation (\$)	Present Book value of Asset (\$)
Booster Pump 1	2012	50	174,284	600	174,284	26,433	3,486	29,919	144,365
Booster Pump 2	2012	50	253,111	600	253,111	38,389	5,062	43,451	209,661
Booster Pump 3	2012	50	<u>253,111</u>	600	253,111	38,389	5,062	<u>43,451</u>	<u>209,661</u>
		Subtotal	680,507				Subtotal	116,820	563,686
Water Tank 1	1988	50	619,263	600	619,263	391,168	12,385	403,553	215,710
Water Tank 2	2012	50	689,091	600	689,091	104,512	13,782	118,294	570,797
Water Tank 3	2012	50	<u>765,262</u>	600	765,262	116,065	15,305	<u>131,370</u>	<u>633,892</u>
		Subtotal	2,073,616				Subtotal	653,217	1,420,399
		Total	2,754,123				Total	770,037	1,984,085

Table 2. Present Book Value of Carteret County Water System

System No	Description	Present Book value of Asset (\$)
SCADA		
Booster Pump House1	SCADA System*	294,000
Land		
Laurel Road Aerial Tank	Land Property	25,428
Laurel Road Treatment Plant	Land Property	57,220
Jonaquins Creek Water House	Land Property	26,097
Aerial Tank	Land Property	130,312
Booster Pump Station-1	Land Property	40,578
Booster Pump Station-2	Land Property	35,312
Booster Pump Station-3	Land Property	34,160
Elevated Tank	Land Property	20,615
	Sub Total	369,722
Well House	Water withdrawal house*	210,000
Jonaquins Creek Well House and Storage	Merrimon Water System*	420,000
Fire Hydrants	Fire rescue purposes	300,000
Water Treatment Plants	Supply/Distribution*	1,575,000
Piping System		
2" PVC	(26,400 ft, \$10/ft)	264,000
4" PVC	(1,320 ft, \$16/ft)	21,120
6" PVC	(151,588 ft, \$24/ft)	3,638,112
6" Ductile	(4,700 ft, \$28/ft)	131,600
8 " PVC	(104,477 ft, \$28/ft)	2,925,356
8" Ductile	(3,235 ft, \$32/ft)	103,520
10" PVC	(3,168 ft, \$34/ft)	107,712
	Sub Total*	7,550,991
	Total (\$)	10,719,713

*Value has been increased by an additional 5% from the 2019 feasibility study

Update to Present Value of Water System
December 2021
Revised March 2022
Carteret County, NC

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Table 3. Estimated Water System Replacement Cost

System Item	Estimated Service Life (Years)	Description	Estimated Replacement Cost
SCADA System	20		\$150,000
Water Treatment Plants	50		\$2,000,000
Well House	50		\$350,000
Fire Hydrants	60	Approx. 100	\$500,000
Booster Pump Station 1	50		\$250,000
Booster Pump Station 2	50		\$300,000
Booster Pump Station 3	50		\$300,000
Water Tank 1	50		\$850,000
Water Tank 2	50		\$900,000
Water Tank 3	50		\$1,000,000
Piping System			
2" PVC	60	(26,400 ft, \$35/ft)	
4" PVC	60	(1,320 ft, \$45/ft)	
6" PVC	60	(151,588 ft, \$60/ft)	
6" Ductile	65	(4,700 ft, \$65/ft)	
8 " PVC	60	(104,477 ft, \$70/ft)	
8" Ductile	65	(3,235 ft, \$75/ft)	
10" PVC	60	(3,168 ft, \$80/ft)	
Piping Subtotal			18,193,635
		Total Estimated Replacement Cost	24,793,635

*Estimated costs based on known information of the water system



Figure 1 Carteret County Water System Map

FEASIBILITY STUDY FOR WATER SYSTEM MERGER

Carteret County, NC



December 2019


DAA Project Number: 18080125-010204




Draper Aden Associates
Engineering • Surveying • Environmental Services

3RD PARTY REVIEW

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- Appendix A Carteret County Water System Maps
- Appendix B Carteret County Water Rates
- Appendix C Town of Beaufort Water Rates



EXECUTIVE SUMMARY

Carteret County (the County) retained Draper Aden Associates (DAA) to evaluate the feasibility of a "merger" of the County's water systems with Town of Beaufort's (the Town) water system. The proposed "merger" would entail the Town of Beaufort taking over the ownership and operation of the County's water systems.

The following tasks were performed:

1. Evaluated the County's water systems assets and maintenance programs.
2. Developed estimated present value of the County's water systems.
3. Reviewed current staffing and potential impacts on the Town's water system staffing, if the merger were to occur.
4. Reviewed the County's water rates, revenues, operating expenses and debt service.
5. Analyzed the projected fiscal impact on the Town of Beaufort water system, if the merger occurs.
6. Developed recommendations for a win-win merger condition for both the Town and the County.

Major findings from the study include:

1. County's water infrastructure is well documented and in good condition.
2. Estimated present value of the County's water system is approximately \$12.3 million.
3. County's current water rate (\$55.10 / 5,000 gallons) is less than the Town's out of town water rate (\$58.79 / 5,000 gallons).
4. County has outstanding water debt of \$2,066,128 (principal only) which will be retired in Fiscal Year 2051-2052.
5. The operating expenses of the County's water system have exceeded revenues in recent years and the deficits have been subsidized by the tax revenues generated from the Special Water Tax District. FY 2019 is the first year where projected expenses will be lower than the revenue. The County believes that FY 2019 will be the new normal as the water system is in good condition now, and the County does not have any need for large capital investment in the foreseeable future.
6. Currently, the County has three (3) water staff and the Town has four (4) water staff. The merged system will need services of a full-time and part time County staff in addition to the four (4) Town staff. There will be a \$165,000 savings in staff compensation. These excess funds can be used for system upgrades or capital expenditures.

DAA's findings show that a merger will be beneficial for both the County and the Town, but to make it workable for the Town, DAA made some recommendations.

**Recommendations:**

1. The County transfers the water systems to the Town at a cost of \$1.
2. The County continues to pay off the current debt service (\$245,800 / per year) for next 11 years to retire the debt earlier and remove or modify the water tax district after debt retirement.
3. Based on the current tax rate, the County will have excess fund (difference between water district tax revenue and debt service fee, \$177,000 per year) after merger until the debt is retired. County will work in good faith with the Town utilizing these funds for upgrades and expansions to the system during the 11-years debt pay-down period. County may also continue to participate in extensions and upgrades beyond the 11 years, for specific county needs within the existing water district boundaries.
4. The Town will maintain the water rates for the special water district at a rate that is less than the County water rates at the merger date and can increase or decrease the rates in future by the same percentage change as the in-Town water rates.

Benefits for the Town:

1. Acquisition of \$12.3 million worth of infrastructure without any financial investment.
2. Expansion of Town's water system and customer base.
3. County's financial support for at least 11 years to address special capital and maintenance issues in the system previously owned by the County.
4. Potential opportunity for annexation.

The advantages of this potential merger outweigh the few economic and financial limitations. Prior to merger of these water systems, the County and Town will need to address all legal and financial aspects of the merger, which will require good-faith negotiations from both entities.

-- End of Section --



1.0 INTRODUCTION

Carteret County and the Town of Beaufort are interested in “merging” the water systems of the two entities – with the Town taking over ownership and operation of the County’s water system.

1.1 Objectives

The objective of this feasibility study is to determine the value of Carteret County’s water systems, understand the staffing needs to operate and maintain the County’s systems, evaluate the financial condition of the County’s water department, identify the potential impact of the proposed merger on the utilities, and develop recommendations to make the merger beneficial for the Town and the County. The findings and recommendations are documented in this DRAFT report for further discussions with the County and the Town staff. This report will be updated based on the discussions between the County and the Town to be facilitated by DAA.

1.2 Report Organization

This report is organized as outlined below:

- ◆ Chapter 2.0 (Carteret County Water System Assessment) describes the County’s water system including land, physical assets, maintenance programs, and near-term capital improvement program.
- ◆ Chapter 3.0 (Estimated Current Value of Carteret County’s Water System) describes the monetary value of the assets and how the values were calculated.
- ◆ Chapter 4.0 (Organization of Carteret County Water Department) describes the current staffing structure and responsibilities.
- ◆ Chapter 5.0 (Revenues and Expenses of Carteret County Water System) describes the water rates, debt service and current financial conditions.
- ◆ Chapter 6.0 (Feasibility of Merger) describes the Town of Beaufort system, advantages to the Town in taking over the Carteret County System, and recommendations to make the merger beneficial to both the County and the Town.
- ◆ Chapter 7.0 (Conclusion) describes the outcome of this feasibility study.

-- End of Section --



2.0 CARTERET COUNTY WATER SYSTEM ASSESSMENT

2.1 System Overview

Carteret County (the County) relies on two groundwater wells for water supply. Water from the first well is treated at the Laurel Road Water Treatment Plant before it is pumped to three (3) elevated storage tanks for distribution within the community. These storage tanks are located with water lines extending to the Craven County line along NC Highway 101 and into the Mill Creek area. There are also water lines extending from the Beaufort Town limits along Highway 70 to East Carteret High School and along Merrimon Road to Laurel Road. The system serves approximately 1,206 customers.

The County also owns and operates a small water system about 20 miles north of Laurel Rd and Merrimon Rd intersection. This small system known as Merrimon Water System (MWS), serves approximately 25 – 30 customers. MWS receives water from the Jonaquins Creek well that consists of a well and an above-ground storage tank.

A map showing Carteret County's water system (including its water district boundary) is shown in Figure 1 of Appendix A. The MWS is shown at the inset of Figure 1 and in Figure 2 of Appendix A.

MWS system is an integral part of the County's water system and should be included in any potential water system merger or transfer discussions. Legalities of such a merger / transfer will be agreed upon and processed by participating agencies prior to acceptance and completion of the merger process.

2.2 Special Water Tax District

The Board of Commissioners of Carteret County established the Special Water Tax District (SWTD) in 2010. Within this district, there is a special tax assessed to taxpayers for water supply and distribution services. The tax rate in the special water district has been 5.5 cents since 2012. In addition, sales tax revenues in the SWTD are used to support the water operations. Table 1 provides the revenue and expenditures for the SWTD for FY2018, FY2019 and FY2020.



Table 1. Revenue and Expenses for the Special Water Tax District

	FY 2018 (Actual) \$	FY 2019 (Amended Budget) \$	FY2020 (Budget) \$
Expenditure Category			
Fees	1,240	3,000	3,000
Transfer to Water Fund	433,600	400,000	420,000
Total	434,840	403,000	423,000
Revenue Sources			
Ad Valorem Taxes	299,136	292,000	292,000
Sales Tax	96,329	95,000	100,000
Interest	1,505	1,000	6,000
Appropriated Fund Balances	0	15,000	25,000
Total	396,969	403,000	423,000

2.3 Water System Assets

The County water system assets include water mains, valves, water meters, fire hydrants, tanks, booster pump stations, a Supervisory Control and Data Acquisition (SCADA) system and land parcels. These assets are listed in Table 2.

Table 2. Water System Assets of Carteret County

Items	Quantity		Description
Water Plant	1		
Land	8 Parcels	16.49 acres	
Pump Stations/Pump Houses	3	Booster Pumps 1, 2, and 3	
Water Tanks	4	3 elevated tanks and one ground tank	
Valves	599		
Water Meters	1,206		
Fire Hydrants	175		
Water Lines	5 miles	2 inches	
	0.25 miles	4 inches	



Items	Quantity	Description
	29.6 miles	6 inches
	20.4 miles	8 inches
	0.6 miles	10 inches
SCADA System	1	Management of elevated water tanks and Jonaquins Creek well house

2.3.1 Storage Tanks

Details for the three elevated storage tanks are provided in Table 3.

Table 3. Elevated Water Tanks

Types of Tanks	Capacity (gallons)	Manufacturer	Design Type	Year Constructed
Taylor Farm Road Tank	200,000	Caldwell	Torus Bottom	2012
Laurel Road Tank	200,000	Phoenix	Double Ellipsoidal	1988
Mayflower Drive Tank	200,000	Phoenix	Torus Bottom	2012

2.3.2 Pump Stations

The County has three booster pump stations. Details of these pump stations are shown in Table 4. Booster Pump 2 provides water at the emergency connection between the Town of Beaufort and the County.

Table 4. Pump Stations

Types of Pump	Cat No/Model Number	Manufacturer	Horsepower (HP)	Design Type (RPM)	Installation Date
Booster Pump #1	R5P 3D/H317	Emerson Motor Co.	5	1170	2012*
Booster Pump #2	EM3774T	Baldor Electric Co.	10	1760	2012
Booster Pump #3	EM3770T	Baldor Electric Co.	7.5	1770	2012

*Estimated, actual date of installation is not available.



2.3.3 Land

The total acreage utilized by the County's water system is approximately 16.49 acres. Table 5 summarizes the properties, the street address and the acreage.

Table 5. Carteret County Water System Property

Property	Address	Total Acres
Laurel Road Aerial Tank	524 Laurel Road	2.04
Laurel Road Treatment Plant	526 Laurel Road	8.12
Jonaquins Creek Water House	150 Jonaquins Creek Road	0.82
Taylor Farm Elevated Tank	209 Taylor Farm Road	1.01
Booster Pump Station #1	142 Shell Landing Road	0.47
Booster Pump Station #2	1109 Hwy 101	0.60
Booster Pump Station #3	3510 Hwy 101	2.56
Mayflower Drive Elevated Tank	104 Mayflower Drive	<u>0.87</u>
Total		16.49

2.4 Asset Maintenance

2.4.1 Pipeline Maintenance

The County's Public Works Department (PWD) performs system maintenance including, but limited to, the following:

- ◆ Detection and repair of leaks in the pipe lines
- ◆ Maintenance of booster pumps and other associated components of the water distribution system
- ◆ Maintenance and replacement of water meters, valves and fire hydrants
- ◆ Water service installations and / or inspections

2.4.2 Tank Maintenance

Southern Corrosion Inc (SCI) has an existing water tank management addendum to contract with the County until year 2030. Per contract, the tanks will be inspected every year and will be washed-out at five (5) year intervals. The tank interior will be recoated at fifteen (15) year intervals, and the exterior will be recoated at five (5) year intervals. The next wash-out is scheduled for year eight (8) of the service



(year 2023), repainting of the tank exterior is scheduled for year twelve (12) of the service (year 2027) repainting of tank interior is scheduled for year twelve (12) of the service (2027).

The contract does not include the complete abrasive blasting of tank exterior nor the pressure washing of tank exterior as a stand-alone apart from a surface preparation for painting.

SCI provides the following services to the County in accordance with the tank's maintenance program:

- ◆ Emergency services (tank leaks, tank failures, etc.)
- ◆ Scheduled cleaning/washout of tanks interiors
- ◆ Inspection of interior and exterior surfaces of tanks
- ◆ Application of protective coatings
- ◆ Maintenance, upkeep and long-term maintenance needs

Table 6 below indicates the scheduled maintenance activities that have taken place under this contract for the last four years. Based on the 2018 inspection results as shown in Table 6, all three tanks are in good condition without any serious deficiencies that require immediate attention.

2.5 Carteret County Water System Capital Improvement Plan

In 2013, the County completed a \$3.51 million water system improvement project. Since 2013, there has been little need for significant capital projects; there were no capital projects scheduled in FY2019 and the FY2020 budget does not include any. The County continues to fund "pay as you go" capital projects, as needed. Recent capital investments include:

- ◆ Fiscal Year 2011: WTP Telemetry Base Upgrade, Addition of 10-inch Color MMI, Replace Tank Level Meter/Digital DSP-MMI, Use Existing Probe Relays-Raw Well Control, and Replace Remotes /Upgrade Phone Line and Radio. Total cost for upgrade was \$27,998.
- ◆ Fiscal Year 2016: BPS Flow Meter and RTU Repair. Total cost for repair was \$4,697.
- ◆ Fiscal Year 2017: Discharge Pump Station SCADA TIE-IN. Total cost for this implementation was \$3,309.
- ◆ Fiscal Year 2018: Softener and filter refurbishment. The total cost was \$121,446

Overall, the water system is in good condition and the County is not expecting any major capital investment in the near future.



Table 6. Tank Maintenance Report (2015-2018)

Tank	Year Constructed	Year-2015	Year-2016	Year-2017	Year-2018
Taylor Farm Road Tank	2012	The tank, its components, and coating systems are in good condition. The interior coating system deficiencies ranged between 0% and 10%, whereas, the exterior coating deficiencies ranged between 0%-2%. Some of the exterior deficiencies included; Pin Point Rust, and Irregular Surface Deterioration. No visual deficiencies were observed pertaining to internal coating system. The safety inspection yielded satisfactory and compliant results pertaining to structural integrity of exterior, storage, safety, and other associated components	The tank, its components, and coating systems are in good condition. The interior coating system is free of any premature failure and provides adequate protection to the structure. The upper portions of the leg ladder, sway rods, and shell wall ladder are showing signs of premature coating failure causing surface corrosion. Repair and scheduled maintenance maybe required	There was no maintenance required during this time. The coating in the exterior and interior are in excellent condition	No deficiencies or touchups were noted, and the overall visual appearance of the water tank is satisfactory
Laurel Road Tank	1988	The tank, its components, and coating systems are in good condition. The interior coating system deficiencies ranged between 0% and 10%, whereas, the exterior coating deficiencies ranged between 0%-2%. Some of the exterior deficiencies included; Irregular Surface Deterioration, Mildew, Peeling Multiple Coats, and Undercutting. Deficiencies pertaining to internal coating system included Pin Point Rust, and Irregular Surface	There were no deficiencies or touch ups noted and the overall visual appearance of the water tank (internal and external) is satisfactory. The obstruction light on tank roof was repaired	Both exterior and interior protective coating seems to be in excellent condition. The interior and exterior coating systems are free of any serious deficiencies and provides adequate protection to the structure.	The water tank, its components, and coating systems are in good condition. The interior and exterior coating systems are free of any serious deficiencies and provides adequate protection to the structure.



<p>Deterioration. The safety inspection yielded satisfactory and compliant results pertaining to structural integrity of exterior, safety, and other associated components. The side wall coating of the storage exterior needs to be monitored as per the report.</p>	<p>The tank, its components, and coating systems are in good condition. The interior coating system deficiencies ranged between 0% and 10%, whereas, the exterior coating deficiencies ranged between 0%-2%. Some of the exterior deficiencies included; Pin Point Rust, Irregular Surface Deterioration, etc. No visual deficiencies were observed pertaining to internal coating system. The safety inspection yielded satisfactory and compliant results pertaining to structural integrity of exterior, storage, safety, and other associated components</p>	<p>The tank, its components, and coating systems are in good condition. The interior coating system is free of any premature failure and provides adequate protection to the structure. On the exterior, such as the ladder and sway/spider rods, are showing signs of premature failure and surface corrosion. Repair and a scheduled maintenance may be required.</p>	<p>Exterior deficiencies included Mildew, Fading, Chalking, Irregular Surface Deterioration, Undercutting, Peeling Paint to Substrate. Adhesion failures and surface corrosion present on 20% of the surfaces. 10% Adhesion failures and surface corrosion observed on the rods and struts. And close to 2% adhesion failure and surface corrosion observed on the catwalk and handrails. The interior protective coating system seems to be in excellent condition</p> <p>Structural wise, the tank is in good condition, but a planned renovation needs to be scheduled by the County Officials. A weathered and weakened coating system is nearing the end of its protective cycle</p>
<p>Mayflower Drive Tank</p>	<p>2010</p>		

-- End of Section --



3.0 ESTIMATED CURRENT VALUE OF THE CARTERET COUNTY WATER SYSTEM

3.1 Theory of Asset Valuation

DAA estimated the value of the County's water system using an asset evaluation approach as described below.

Book Value (BV) approach was used in estimating the value of the fixed assets. The BV approach uses equation (1) to estimate the present worth of an asset as stated below:

$$\text{Present BV of Asset (\$)} = \text{Historical Cost (\$)} - ((\text{Accumulated Depreciation (\$)} + \text{Current Depreciation (\$)}) \quad (1)$$

Traditionally, straight line depreciation (SLD) technique is used to estimate depreciated value of water system assets. Historical cost represents the cost of the assets on the day of acquisition. DAA was able to locate financial records pertaining to purchase prices on some of these assets from the County's finance department.

Accumulated depreciation is calculated using equation (2), and incorporates useful life of the water distribution system component:

$$\text{Accumulated depreciation (\$)} = (\text{Net Amount to be depreciated} / \text{Total useful life in months}) \times ((\text{Fiscal year beginning date} - \text{date of acquisition}) / 30.4167) \quad (2)$$

The value of 30.4167 is used for converting days to months.

Depreciation value (\$) for each asset for the current year is estimated using the following equation:

$$\text{Current Depreciation (\$)} = \text{Net amount to be depreciated (\$)} / \text{Total useful life (months)} \quad (3)$$

The equation (3) may be modified if the depreciation amount (\$) in equation (3) exceeds the difference of net amount to be depreciated and accumulated depreciation. The revised equation for Current Depreciation is stated below:

$$\text{Depreciation Current Year (\$)} = \text{Net Amount to be depreciated (\$)} - \text{Accumulated depreciation (\$)} \quad (4)$$



The Net amount to be depreciated (\$) is calculated using the equation (5)

$$\text{Net Amount to be depreciated (\$)} = \text{Historical Cost (\$)} - \text{Salvage Value (\$)} \quad (5)$$

For purpose of estimation, the salvage value of each system component was assumed at zero dollar (\$0). With this assumption, the net amount to be depreciated was equaled to the historical cost of the asset.

3.2 Estimated Value of the County’s Water Systems

The County provided detailed asset data and historical costs for the pump stations and the water tanks. Book Value (BV) of these assets was calculated and is documented in Table 7. Historical cost data for other assets such as fire hydrants, the water treatment plant, water mains, and the SCADA system installed at Booster Pump 1 were not available, but the County provided financial data that detailed the present book value of the assets as listed in Table 8. Adding the total book values listed in the Tables 7 and 8, the net worth of the water system assets owned by the County was calculated to be approximately \$12,335,392.



Feasibility Study for
Water System Merger

Table 7. Estimated Book Value of Carteret County Water System

Assets	Date of Acquisition	Design Life (yrs)	Historical Cost (\$)	Total Useful life (months)	Net Amount to Be Depreciated (\$)	Accumulated Depreciation (\$)	Current Depreciation (\$)	Total Depreciation (\$)	Present Book value of Asset (\$)
Booster Pump 1	2012	50	174,284	600	174,284	19,462	3,486	22,947	151,337
Booster Pump 2	2012	50	253,111	600	253,111	28,264	5,062	33,326	219,785
Booster Pump 3	2012	50	<u>253,111</u>	600	253,111	28,264	5,062	<u>33,326</u>	<u>219,785</u>
		Subtotal	680,507				Subtotal	89,600	590,907
Water Tank 1	1988	50	619,263	600	619,263	366,397	12,385	378,783	240,480
Water Tank 2	2012	50	689,091	600	689,091	76,949	13,782	90,730	598,361
Water Tank 3	2012	50	<u>765,262</u>	600	765,262	85,454	15,305	<u>100,759</u>	<u>664,502</u>
		Subtotal	2,073,616				Subtotal	570,272	1,503,344
		Total	2,754,123				Total	659,872	2,094,250

See Section 3.1 for the equations used in BV calculations



Table 8. Present Book Value of Carteret County Water System

System No	Description	Present Book value of Asset (\$)
SCADA		
Booster Pump House1	SCADA System*	280,000
Land		
Laurel Road Aerial Tank	Land Property	25,428
Laurel Road Treatment Plant	Land Property	57,220
Jonaquins Creek Water House	Land Property	26,097
Aerial Tank	Land Property	130,312
Booster Pump Station-1	Land Property	40,578
Booster Pump Station-2	Land Property	35,312
Booster Pump Station-3	Land Property	34,160
Elevated Tank	Land Property	20,615
	Sub Total	369,722
Well House	Water withdrawal house*	200,000
Jonaquins Creek Well House and Storage	Merrimon Water System*	400,000
Fire Hydrants	Fire rescue purposes	300,000
Water Treatment Plants	Supply/Distribution*	1,500,000
Piping System		
2" PVC	(26,400 ft, \$10/ft)	264,000
4" PVC	(1,320 ft, \$16/ft)	21,120
6" PVC	(151,588 ft, \$24/ft)	3,638,112
6" Ductile	(4,700 ft, \$28/ft)	131,600
8" PVC	(104,477 ft, \$28/ft)	2,925,356
8" Ductile	(3,235 ft, \$32/ft)	103,520
10" PVC	(3,168 ft, \$34/ft)	107,712
	Sub Total	7,191,420
	Total (\$)	10,241,142

*Estimated value

--End of Section --



4.0 ORGANIZATION OF CARTERET COUNTY WATER DEPARTMENT

The County's water system is managed by the Public Works Department (PWD) Director. Water operations are managed by a lead water plant operator and utilities technician who report to the PWD Director. The PWD Directors reports to General Service Director who in turn is managed by the Assistant Manager of the County. The Assistant Manager reports to the County Manager. Billing and collection responsibilities for the systems are provided by the County Finance Office. An organizational chart for the Water Department is shown in Figure 1.

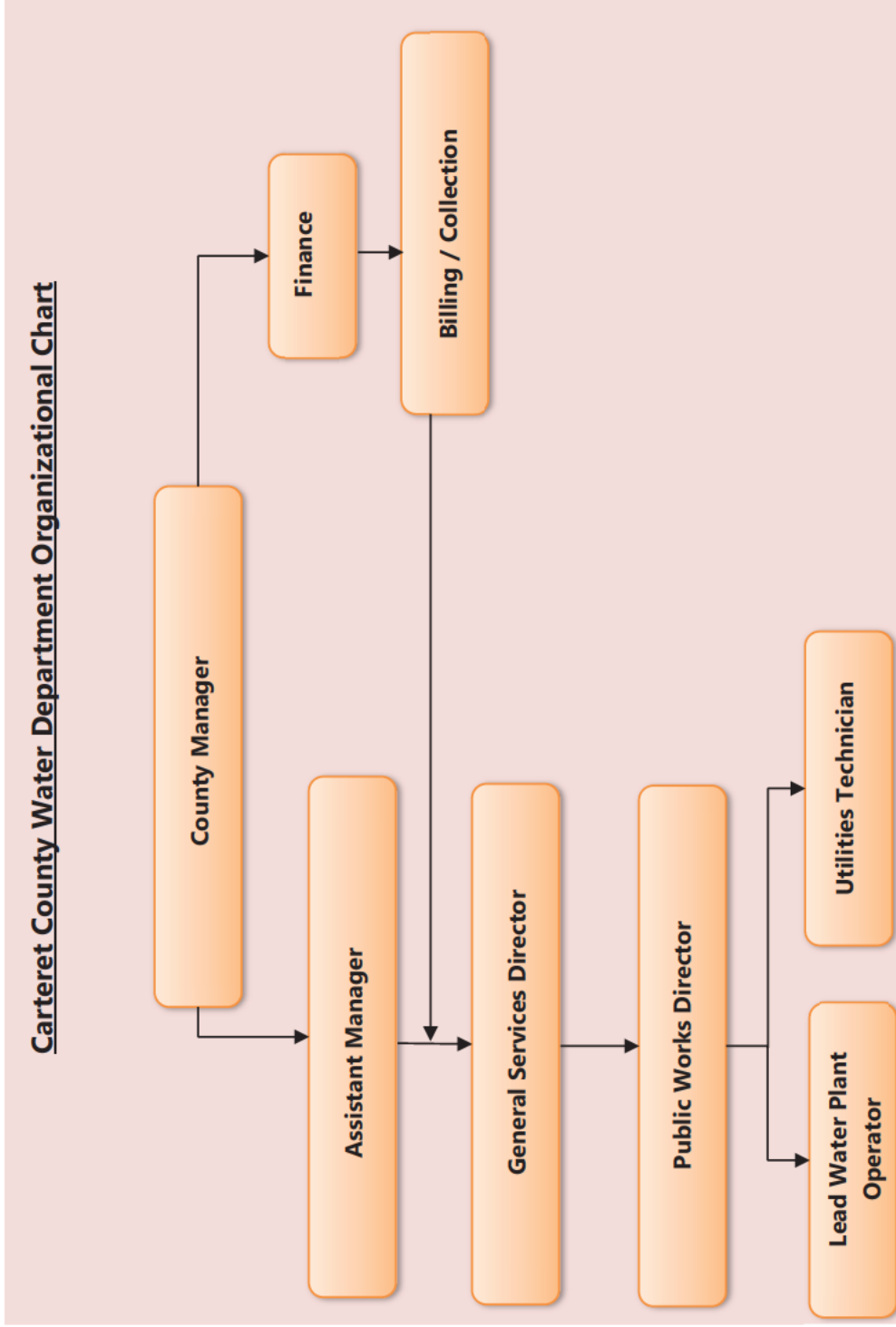


Figure 1. Carteret County Organizational Chart



5.0 REVENUES AND EXPENSES OF CARTERET COUNTY WATER SYSTEM

5.1 Water Rates

Currently, the County charges \$55.10 for every 5,000 gallons of water to customers who are billed per measurements recorded on a three-fourth (3/4) inch meter (See the County's Water Rate Sheet in Appendix B). There is a separate water rate structure for customers served by 1, 2, and 4-inch meters. The County has also developed a specific readiness to serve rate for the Merrimon water system customers. For this study, only three-fourth (3/4) inch meter is used to conduct comparative analysis of the water rates for both the County and the Town system.

The Town charges \$35.72 for every 5,000 gallons to in-town customers using three fourth (3/4) inch meters (See the Town's Water Rate Schedule in Appendix C). The comparative out-of-town water rate is \$58.79.

5.2 Outstanding Debts and Repayment Schedule

Current utility debt for the County is at \$2,066,128 with an estimated interest of \$619,319 until the loan amount is retired by the year 2052. Table 9 and Figure 2 below show the debt payment schedule for each year. The debt payment amount for each year will significantly lower after FY 2025-26 and the debt amount per year will remain relatively constant until the loans are completely retired.

Table 9. Water Utility Debt Payment Schedule for Carteret County

FY Year	Principal (\$)	Interest (\$)	Total Utility Debt (\$)	Years
FY 19-20	\$189,032	\$55,202	\$244,234	1
FY 20-21	\$190,032	\$49,835	\$239,867	2
FY 21-22	\$190,032	\$44,442	\$234,474	3
FY 22-23	\$191,032	\$39,047	\$230,079	4
FY 23-24	\$160,000	\$33,626	\$193,626	5
FY 24-25	\$161,000	\$29,989	\$190,989	6
FY 25-26	\$161,000	\$26,322	\$187,322	7
FY 26-27	\$22,000	\$22,660	\$44,660	8
FY 27-28	\$23,000	\$22,055	\$45,055	9
FY 28-29	\$23,000	\$21,423	\$44,423	10



FY Year	Principal (\$)	Interest (\$)	Total Utility Debt (\$)	Years
FY 29-30	\$24,000	\$20,790	\$44,790	11
FY 30-31	\$25,000	\$20,130	\$45,130	12
FY 31-32	\$25,000	\$19,443	\$44,443	13
FY 32-33	\$26,000	\$18,755	\$44,755	14
FY 33-34	\$27,000	\$18,040	\$45,040	15
FY 34-35	\$27,000	\$17,298	\$44,298	16
FY 35-36	\$28,000	\$16,555	\$44,555	17
FY 36-37	\$29,000	\$15,785	\$44,785	18
FY 37-38	\$30,000	\$14,988	\$44,988	19
FY 38-39	\$31,000	\$14,163	\$45,163	20
FY 39-40	\$31,000	\$13,310	\$44,310	21
FY 40-41	\$32,000	\$12,458	\$44,458	22
FY 41-42	\$33,000	\$11,578	\$44,578	23
FY 42-43	\$34,000	\$10,670	\$44,670	24
FY 43-44	\$35,000	\$9,735	\$44,735	25
FY 44-45	\$36,000	\$8,773	\$44,773	26
FY 45-46	\$37,000	\$7,783	\$44,783	27
FY 46-47	\$38,000	\$6,765	\$44,765	28
FY 47-48	\$39,000	\$5,720	\$44,720	29
FY 48-49	\$40,000	\$4,648	\$44,648	30
FY 49-50	\$42,000	\$3,548	\$45,548	31
FY 50-51	\$43,000	\$2,393	\$45,393	32
FY 51-52	\$44,000	\$1,210	\$45,210	33
Total	\$2,066,128	\$619,139	\$2,685,267	

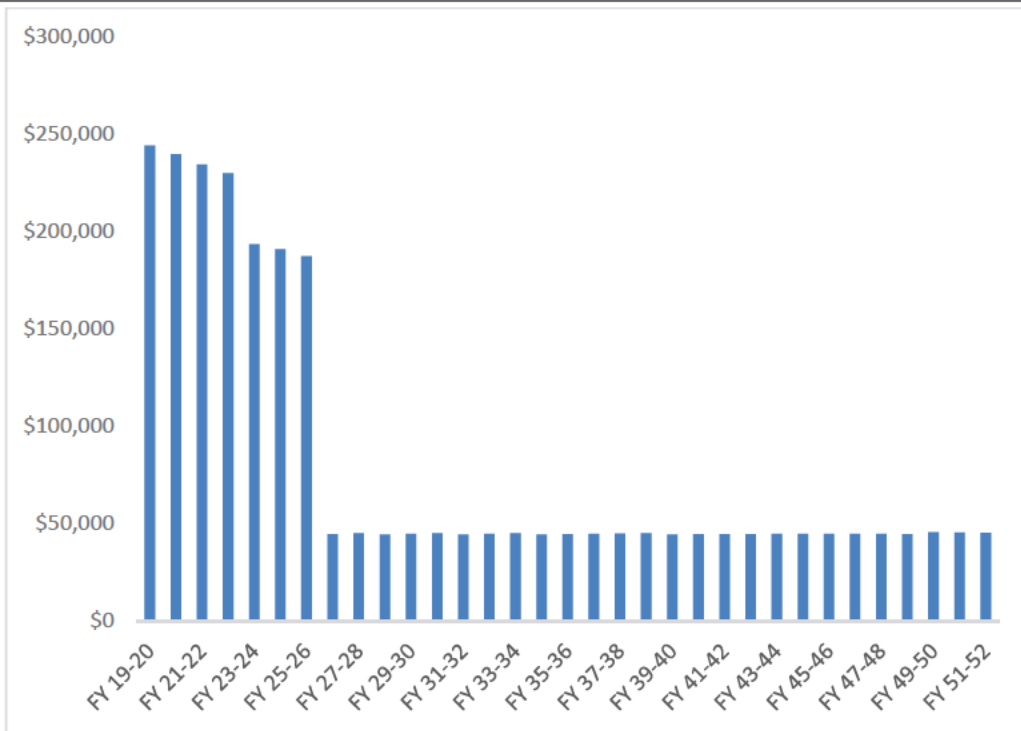


Figure 2. Carteret County Water Utility Debt Payment Schedule

5.3 Revenue and Expenses

5.3.1 Review of Historical Revenue and Expenses

A review of the County’s historical water system budget (including the debt services) between FY 2016 and FY 2019 listed in Table 10 shows significant water system operating expenses beyond the revenue earned. This data indicates that the County has been losing money with the water system and needed to subsidize the system with the SWTD funds to keep the system solvent. The deficit margin widened in 2018 considering the additional capital improvement expense for that year. However, for 2019, there was a marginal decline in the water system operating expense which lead to the deficit being similar to that of 2016 and 2017 respectively.



Table 10. Budget for F2016-FY2019

Year	Water System Revenue	Water System Operating Expense	Water System Debt Service Fee	Water System Capital Outlay	Net Income (Deficit)
2016	\$576,598	\$554,733	\$263,589	-	(\$241,724)
2017	\$584,344	\$668,215	\$259,277	-	(\$343,148)
2018	\$678,879	\$828,412	\$253,939	\$37,898	(\$441,370)
2019	\$711,732	\$726,384	\$249,600	\$25,500	(\$289,752)
Total	\$2,551,553.00	\$2,777,744.00	\$1,026,405.00	\$63,398.00	(\$1,315,994)

5.3.2 Review of FY 2020 Finances

The projected fiscal budget for the County in the year 2020 is presented in Table 11. Per projected water fund revenue and water fund expenses for FY 2020, there is a net fiscal deficit of \$162,990. This deficit may be eliminated by using revenue generated from the SWTD. Using this fund to eliminate the deficit leaves a net balance of \$14,130 that may be used for other operational expenses.

Table 11. Projected Fiscal Budget for year 2020

Items Description	Budget
Water Distribution System Value ¹	\$12,335,392
Total Utility Debt (including interests) ²	\$2,685,267
Debt Pay Off Period	2051-2052
FY 2020 Debt Service Fee ³	\$245,880
Water Tax District Revenue (FY 2020 Projected) ⁴	\$423,000
Water Fund Revenue (FY 2020 Budget) ⁴	\$710,400
Water Fund Expense (FY 2020 Budget) ⁴	\$873,390
Water Fund Loss ⁵	(\$162,990)
Water Tax District Revenue Balance ⁶	\$14,130

Notes:

1. See Section 3.2 for reference
2. See Table 9 for reference
3. See Tables 9 for reference. The difference between the monetary value of \$245,880 in Table 11 compared to the fiscal value of \$244,234 in Table 9 for FY2020 may due to budgetary discretion
4. Projected FY 2020 Budget
5. Water Fund Loss/Deficit is estimated using the equation: Water Fund Revenue (\$710,400) - Water Fund Expense (\$873,390)
6. Water Tax District Revenue Balance is estimated using the equation: Water Tax District Revenue – (FY20 Debt Service Fee + Water Fund Loss)



5.4 Opportunity to Eliminate Deficit

The expense in 2019 shows significant reduction over the previous years and is expected to be the norm as the County's system does not anticipate significant capital investment in near future.

A moderate projection of 2% yearly increase in both water district tax revenue and water system expense may be adequate to run the system sustainably. Table 12 lists the yearly revenue and expenses from 2020 to 2025 using 2019 as the base year for projection. This projection shows a positive yearly cash flow. Thus, if the water system in its current condition (with a value of \$12.3 million) can be separated from the debt services, it would offer an attractive acquisition option for any utility.

Table 12. Fiscal and Projected Budget for FY 2019-FY 2025

Year	Water Tax District Revenue	Water System Expense	Cash Flow
2019	\$711,555	\$704,255	\$7,300
2020	\$725,786	\$718,340	\$7,446
2021	\$740,302	\$732,707	\$7,595
2022	\$755,108	\$747,361	\$7,747
2023	\$770,210	\$762,308	\$7,902
2024	\$785,614	\$777,554	\$8,060
2025	\$801,327	\$793,106	\$8,221

-- End of Section --



6.0 FEASIBILITY OF MERGER

6.1 Water System of Town of Beaufort

The Town of Beaufort provides water and sewer services to its residents through established water rates that covers existing financial debts and other operational costs pertaining to these enterprise funds. The Town purchases water from the County for distribution in Eastman Creek subdivision. Currently the Town provides limited sewer service to approximately 200 customers located within County's SWTD with water purchased from the District at its existing rate. The Town has sewer force mains along NC Highway 70 serving sewer needs to East Carteret High School, also extending along NC Highway 101 serving sewer needs to Eastman's Creek and Jarrets Bay Industrial Park. This existing layout of the sewer force mains provides an opportunity to serve sewer needs within a large area of the County's SWTD which could offer an attractive condition to grow the customer base for the Town's sewer system.

Current water and sewer rate for an out-of-town customer is approximately double the rate of in-town customer. Acquiring the County's water system would increase the Town's customer base by approximately 34% with no cost for infrastructure. The potential opportunity to grow both water and sewer services within the County, at a lower rate will encourage businesses and developers to seriously consider annexation when planning growth within the merged service area.

6.2 Organizational Impact of Merger

Currently, the County's PWD has three personnel who are directly responsible for water operations. The organizational responsibilities of these people have been described in Chapter 3. If a merger is executed, one and possibly two of these employees could be transferred to Town's Public Utilities Department, which now has a total of four (4) full time employees. For the purpose of this report we will calculate the Town's additional personnel needs to support the merger at service provided by a full-time and a part-time employees. The County would transfer the remaining employee to another area of need with their other operations. Based on 2020 budget, salaries for the County's 3 water staff are approximately \$330,000, including benefits. The merger could provide an opportunity to save a



minimum of half (\$165,000) that expense. With other redundancies within the budgets, this number could very well be higher.

Water billing, collection and customer service support would be completely transferred from the County to the Town. As the Town is already managing its own billing, it is assumed that no additional employee is needed for billing the merged system.

6.3 Key Advantages of Merger for Town of Beaufort

There are several advantages for the Town to acquire the County's water distribution system. Some of the key benefits are listed below:

- ◆ The Town will acquire approximately \$12.3 million worth of infrastructure from the County.
- ◆ The Town will be able to operate the system largely with existing personnel plus 1.5 additional staff and equipment.
- ◆ The merged water systems would provide an opportunity not only for system growth but could also spur business and residential growth in the Town's tax base through potential annexations.
- ◆ With the merger, a new rate structure may be proposed to attract developers and business that are near the existing sewer force mains to consider annexation to avoid out-of-town rates.

6.4 Recommendation for Carteret County

As shown in Table 9, the water district system has an existing debt of \$2,066,128 (principal only) that will be fully retired by the year 2052. This debt poses a liability and concern for the Town if they acquire the County's water distribution system. For a successful merger of the two water distribution systems, the following are recommended measures for the County:

- ◆ The County would maintain the SWTD for a minimum of eleven (11) years until FY 2031. The debt service for FY 2020 is \$245,800 (adopted by the County Commissioner) which will be paid using the revenue generated from special water district funds. The County should pay this same debt service fee amount for the next eleven (11) years to retire the debt. Once this existing debt is retired, the County may no longer need to maintain this special water tax district and can either eliminate the tax altogether or modify it for future needs within the district for health and safety.
- ◆ If the County transfers ownership of its water systems to the Town and agrees to continue pay \$245,880 per fiscal year toward the debt, there will be a net balance of \$177,120 (Table 11; \$423,000-\$245,880) every year, in the special water district funds. The County may use



these remaining funds to participate in capital improvement upgrades and replacements of the existing infrastructure transferred to the Town. However, capital improvements directly benefiting the Town would be subject to negotiation.

- ◆ The County would maintain the right to request upgrades to the existing system within the SWTD boundaries with mutual understanding that the cost for such an upgrade will be paid by the County for a negotiated number of years. A potential negotiated period may include the next 11 years when the County would continue to collect the SWTD revenue to pay off the debt service. It is also expected that both the Town and the County will work together to accomplish these projects through a fair assessment of capital project benefits to each entity.

6.5 Recommendation for Rate Modification

Existing out-of-town rates (Appendix C) established by the Town are currently seven percent (7%) higher than rates charged by the County (Appendix B). In exchange for the County's commitment to transfer ownership of the system, participate in capital costs for a period of eleven (11) years and retire the existing debt, it is recommended that the Town adopts a readiness to serve charge for the SWTD that is the same as that for the out of town customers but keep the water use rate as that of in town customers, shown in Table 13.

Table 13. Proposed Out of Town Water Rates

Description	Amount (\$)
Readiness to Serve Charge ¹	\$20.74
Variable Rate for Water ²	\$5.07/1,000 gallons
Cost for 5,000 gallons ³	\$46.09

Notes:

1. Out of Town Readiness to Serve
2. Water Usage rate for in Town customers (Appendix c)
3. Cost = \$20.74 + (\$5.07*5) = \$46.09

This rate is a recommendation only that still keeps the water rate for the current County customers below their present water rate. For this report, only the rate for 3/4 inch meters was considered; the rates for other size meters serving customers within the water district boundary can be set using similar logic.



Accepting this water rate structure in addition to acquiring the County water system infrastructure, would not limit the Town's right to maintain another out-of-town rate for customers outside the County's current water district boundary.

6.6 Financial Advantages for Town

The proposed rate structure (for 3/4-inch meters) shown in Table 13 would save County customers an estimated \$9.01 per month compared to the existing county water rate of \$55.10 per month. Though the new rate structure would reduce water sales revenues generated from the County customers, the savings in operating expense through reductions in salaries (1.5 persons instead of 3 persons) and other redundant expenses needed for operation would more than compensate for any losses. As described in Section 6.2, the merger would save nearly \$165,000 per year in salaries and benefits. Considering that saving, water system revenues and expenses for before and after merger conditions are calculated and shown in Table 14.

Table 14. Comparison of Cash Flow - Before and After Merger

Year	Projected Special Water District Revenue (Before Merger) ¹	Projected Special Water District Revenue (After Merger) ²	Projected Water System Expense (Before Merger) ¹	Water System Expense (After Merger) ³
2020	\$725,786	\$606,757	\$718,340	\$553,340
2021	\$740,302	\$618,892	\$732,707	\$567,707
2022	\$755,108	\$631,270	\$747,361	\$582,361
2023	\$770,210	\$643,896	\$762,308	\$597,308
2024	\$785,614	\$656,773	\$777,554	\$612,554
2025	\$801,327	\$669,909	\$793,106	\$628,106
Total	\$4,578,346.51	\$3,871,471	\$3,827,121	\$3,3541,376

Notes:

1. From Table 12
2. 83.6% of Revenue (Before Merger); 83.6% is based on Current County rate of \$55.1 and proposed rate of \$46.09 as calculated in Table 13
3. Expense (Before Merger) minus savings in staff compensation (\$165,000)

Projected after-merger revenue and expense show positive cash flow for the County system that would be acquired by the Town. The higher out-of-town rate for the acquired system would encourage



customers and developers to strongly consider the option of annexation. The annexation would lead to lowering of utility rates and eventually increase tax base for the Town.

-- End of Section --

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7.0 CONCLUSION

The merger of the two water systems will be beneficial for both the County and the Town. Acceptance of merger conditions would benefit the Town from acquiring \$12.3 million of water system assets. This would also lead to expansion of their customer base without the expenditure of major funds for years to come.

Acquiring the County's water system would require periodic upgrades and capital improvement investments, however, the capital associated with such an upgrade is not a concern due to the following reasons:

- ◆ Potential for growth in utility revenues and tax base.
- ◆ Recommended agreement for County participation in costs for a period of a minimum of eleven (11) years after transfer of the water distribution system for capital improvements to the existing system.
- ◆ County participation toward "county specific" upgrades and extensions within the district.

Considering the advantages and disadvantages of this potential merger, DAA recommends transfer of the County's water distribution system to the Town, for the sum of one dollar and other valuable considerations. The acceptance of the merger conditions by the Town will be based on refinement of these conditions and other concessions by both parties. All legal issues regarding such transfer will need to be addressed before the merger of the two water systems can be completed and executed.

-- End of Section --



8.0 REFERENCES

Blank Depreciation Worksheet Developed for City of Dogwood Depreciation Calculation Worksheet-Government Capital Assets.

Laurel Park / Hendersonville Water System Merger Feasibility Study, Town of Laurel Park, North Carolina, June 2017.

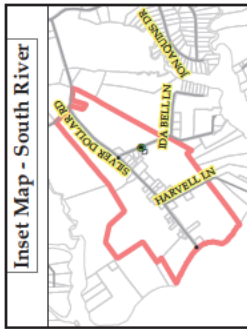
Jordan Lake Water Supply Storage Allocation Request, City of Raleigh and Merger Partners, January 13, 2015.



Appendix A
Carteret County Water System Maps

Figure 1

Carteret County's Water System



Carteret County Water District Infrastructure

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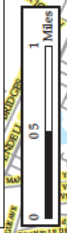
Legend

- ▲ Water Plant
- ★ Pump Stations = 3 ct
- Tanks = 4 ct
- Valves = 599 ct
- Water Meters = 249 ct
- Fire Hydrants = 175 ct

Water Line Sizes & Total Lengths

- 2 in = 5 mi
- 4 in = 0.25 mi
- 6 in = 29.6 mi
- 8 in = 20.4 mi
- 10 in = 0.6 mi

□ County Water District Boundary



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Figure 2

Merrimon Water System

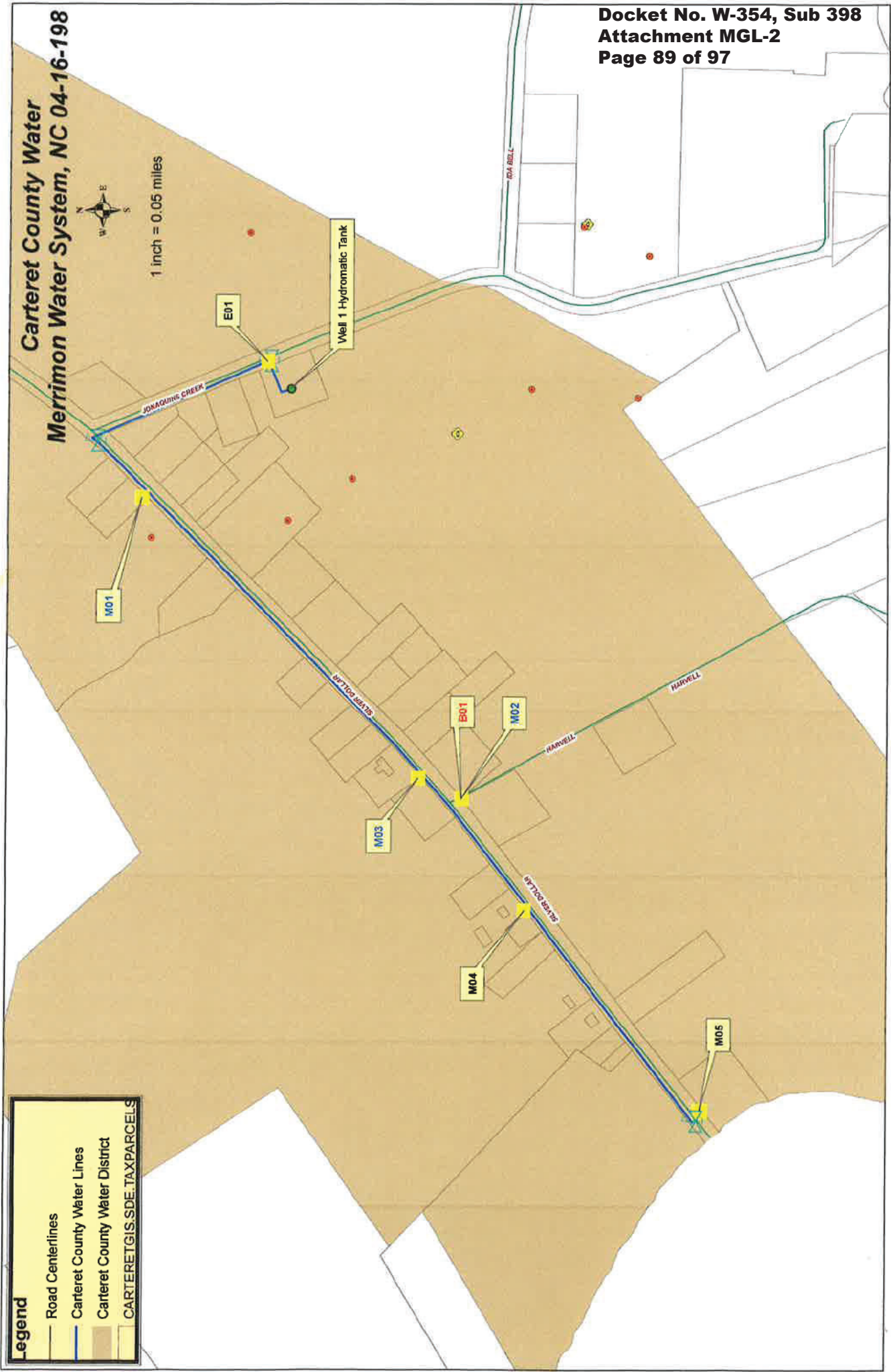
Carteret County Water Merrimon Water System, NC 04-16-198



1 inch = 0.05 miles

Legend

- Road Centerlines
- Carteret County Water Lines
- Carteret County Water District
- CARTERETGIS.SDE.TAXPARCELS





Appendix B
Carteret County Water Rates

Water Service Fee Schedule FY 2018-2019

3/4" Meter

Basic Charge (No Usage) Flat Fee	\$27.50 / mo. Covers 1 st 1,000 gals.
Volume Charge	\$6.90 per 1,000 gals

1" Meter

Basic Charge (No Usage) Flat Fee	\$38.00 / mo. Covers 1 st 1,000 gals.
Volume Charge	\$6.90 per 1,000 gals

2" Meter

Basic Charge (No Usage) Flat Fee	\$110.00 / mo. Covers 1 st 15,000 gals.
Volume Charge	\$6.90 per 1,000 gals

4" Meter

Basic Charge (No Usage) Flat Fee	\$340.00 / mo. Covers 1 st 53,000 gals.
Volume Charge	\$6.90 per 1,000 gals

Merrimon System (3/4" Meter)

Basic Charge (No Usage) Flat Fee	\$16.00 / mo. Covers 1 st 1,000 gals.
Volume Charge	\$6.90 per 1,000 gals

Town of Beaufort (Eastman's Creek)

Basic Charge (No Usage) Flat Fee	\$27.50 / mo. Covers 1 st 1,000 gals.
Volume Charge	\$6.90 per 1,000 gals

Fire Hydrant Usage

Hookup & Service Charge: \$75.00/Monthly
Mobilization to hydrant site and employee on site during tank fill.
\$200.00 Deposit
\$8.75 per 1,000 gallons.

Hydrant & Hydrant Meter Tampering	\$250.00 1 st offense \$500.00 2 nd offense (and Legal Action)
Damage Fee – Fire Hydrant	\$2,500.00

Fire Line – Sprinkler Fee

Size	Monthly fee
2"	\$27.50
4"	\$32.50
6"	\$75.00
8"	\$105.00

Tap Fees

Meter Size	Tap Fee**
3/4 "	\$1,000.00
1"	\$1,150.00
2"	Cost + 10%
4"	Cost + 10 %

****Additional \$900.00 Tap Fee for any meter requiring road bore work**

Any meter 2 inch or larger will be engineered by Mc David & Associates and County will charge cost of materials and installation, engineering fees and additional 10%.

Security Deposits

Property Owner	\$100.00
Renter/Lease holder	\$200.00

Damage and Tampering Fees

Tampering Fee - Meters	\$100.00
2nd Offense (and Legal Action)	\$500.00
Damage Fee – Meters	\$135.00
Damage Fee – MXU Remote Unit	\$135.00

Other Fees

Non-Sufficient Check Fee **\$25.00**

Bank Inspections **\$30.00**

Late Charges **10% of balance**

Service Fee* **\$30.00**

*At the time of reconnection the deposit on account must be equal to the deposit amount required for new accounts as of that date.

*All accounts subject to disconnection that have not been paid by 5:00 pm on the day prior to disconnections will be charged the service fee.



Appendix C
Town of Beaufort Water Rates

Water & Sewer Rates & Fees

All water and sewer taps made outside Town limits are double in-town rates shown above. Water or sewer capacity fees outside Town limits are negotiable but will not exceed 2X rates shown above.

Upgrades in service, i.e., changing from a 3/4" meter to a 1" meter, are subject to a difference in the water tap, water capacity, and sewer capacity fees.

All taps larger than 2" shall be installed at developer's cost in accordance with Town of Beaufort standards and developers shall pay a tap-on fee as shown above.

► Tap & System Development Fees

SIZE	TAP FEES		SIZE	SYSTEM DEVELOPMENT FEES	
	WATER	SEWER		WATER	SEWER
¾"	\$ 700	\$ 750	¾"	\$ 476	\$ 5,524
1"	800	750	1"	793	6,207
1 ½"	1,075	750	1 ½"	1,585	7,015
2"	1,375	750	2"	2,536	8,064
3"	575	750	3"	4,755	10,445
4"	625	750	4"	7,925	15,875
6"	850	750	6"	15,850	22,550
8"	1,175	750	8"	25,360	26,240

FY 2020 Budget

► **Water & Sewer Usage Rates**

WATER USAGE RATES

<u>TYPE</u>	<u>SIZE</u>	<u>IN TOWN</u>	<u>OUTSIDE</u>
<i>BASE</i>	¾"	\$ 10.37	\$ 20.74
	1"	17.32	37.33
	1 ½"	34.53	82.96
	2"	55.27	147.25
	3"	110.65	333.91
	4"	172.87	NA
	6"	345.63	1,327.36
<i>VARIABLE</i>	1000 gal	5.07	7.61

SEWER USAGE RATES

<u>TYPE</u>	<u>SIZE</u>	<u>IN TOWN</u>	<u>OUTSIDE</u>
<i>BASE</i>	¾"	\$ 21.17	\$ 42.34
	1"	35.85	70.01
	1 ½"	70.50	140.99
	2"	112.20	225.67
	3"	225.88	451.77
	4"	352.90	705.81
	6"	705.80	1,411.19
<i>VARIABLE</i>	1000 gal	16.80	33.60

► **Water & Sewer Service Charges**

WATER & SEWER SERVICE CHARGES

New Account Service Fee	\$20	Waived with bank draft
Application Fee	5	
<i>SECURITY DEPOSITS</i>		
3/4" meter	\$75-225,	based on credit score
1" meter	100	
1 1/2" meter	140	
2" meter	275	
Transfer Account	25	
Returned Check Fee	25	
Late Fees	10%	added to late portion
Reconnect Fee - Business Hours	25	
Reconnect Fee - After Hours	75	
After Hours Service Calls	75	
Temporary Connection (for cleaning, renovation inspection, etc.)	25	available for a 2-week period, plus water and sewer usage charges
Fire Hydrant Meters	75	mobilization, on site-employee, and 5,000 gal of water; additional \$.01/gal
Irrigation/Dock Meter	700	tap fee
Meter-Only Install	400	no new tap fee
Meter Testing	30	
Meter Tampering	100	



THANK YOU!



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