



Engineering
Landscape Architecture
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WATER AND SEWER SYSTEM DEVELOPMENT FEE

SUPPORTING ANALYSIS

Town of Marshville, North Carolina

UPDATED MARCH 2024



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TABLE OF CONTENTS

1.0	Introduction	1
2.0	System Overview.....	1
2.1	Existing Water System	1
2.2	Existing Sewer System	1
3.0	Methodology.....	3
3.1	Water System Development Fee	3
3.2	Sewer System Development Fee	4
3.2.1	Sewer Buy-In Method	4
3.2.1	Incremental Cost Method.....	5
3.2.1	Combined Sewer System Development Fee	6
4.0	Fee Adjustment, Collection, and Use	7
4.1	Fee Adjustment for Non-Residential Usage.....	7
4.2	Timing for Collection of System Development Fees	8
4.3	Use of System Development Fees	8
5.0	Conclusion and Recommendations	9

INDEX OF TABLES

Table 1: Water System Development Fee Summary	4
Table 2: Sewer System Development Fee Buy-In Method Summary	5
Table 3: Sewer System Development Fee Incremental Cost Method Summary	6
Table 4: Combined Sewer System Development Fee	6
Table 5: System Development Fee's for Residential Customers	7
Table 6: Fee Adjustments Based on Meter Size & Type	7

Appendix A: Detailed Water Component Estimates

Appendix B: Detailed Sewer Component Estimates & Revenue Credit Calculation

Appendix C: House Bill 436

1.0 INTRODUCTION

During the 2017 session, the North Carolina General Assembly passed House Bill 436 in order to give water and sewer service providers the authority to charge fees for system development and capacity. Before implementing a system development fee schedule, service providers are required to complete a supporting analysis to document and detail the establishment of fees. The supporting analysis was originally completed in 2022 and is being updated due to a change in the preferred alternative for future improvements to disconnect from the Union County sewer system. The new plan includes diverting all flow to the existing lagoons on the southeast side of town, and constructing a new regional pump station and forcemain to allow for the discharge of all wastewater from the Town to Anson County. The following report describes the methodology and assumptions used in establishing the updated system development fee for the water and sewer systems.

2.0 SYSTEM OVERVIEW

The Town of Marshville operates water and sewer systems that provide service to users throughout the town limits as well as to areas within the county. The following sections provide an overview of the main components contributing to the systems overall capacity.

2.1 Existing Water System

The Town of Marshville water system is operated under PWS ID# 01-90-015, and consists of a booster pump station, elevated storage tank, and approximately 40.9 miles of 3/4-inch through 8-inch water mains.

The Town has a contract with Anson County to purchase their daily finished water supply. The Town also has a connection with Wingate to use in emergency situations. Finished water is pumped through a booster pump station and 8-inch water main to the Town's 250,000-gallon elevated tank and throughout the distribution system.

Treatment of the raw water is provided by the Anson County Water Filtration Plant through two interconnection points and is distributed to Marshville via an 8-inch and 6-inch water transmission main. Both the 6-inch and 8-inch water transmission mains were included in the system development fee calculation, along with both Anson County Interconnections.

2.2 Existing Sewer System

The Town of Marshville owns and operates a wastewater collection system that consists of approximately 23.8 miles of 6-inch through 12-inch gravity mains; 4 sewer pump stations; and approximately 6.1 miles of 2-inch through 6-inch forcemain. The collection

system is divided into three main sub-basins, with flow from the north and west sub-basins being combined and conveyed to the Union County Wastewater Treatment plant and flow from the south sub-basin being conveyed to the Anson County collection system and wastewater treatment plant.

Wastewater flows to the Union County sewer system by gravity. The Anson County interconnection consists of a pump station and approximately 21,400 linear feet (lf) of 6-inch forcemain. Based on available information, the agreement with Anson County allows for the discharge of 0.200 MGD to the county system. However, the overall capacity of the system is based on the total collection system of 0.69 MGD. The overall system capacity is taken to be the capacity for the interconnection with Anson County plus the capacity of future improvements to discharge more flow to Anson County.

The Town has two main gravity sewer outfalls, one consisting of 8-inch and 10-inch trunk lines that carry flow to the Union County interconnection and another consisting of 8-inch, 10-inch, and 12-inch trunk lines that transfers flow to the lagoon system for dispersion. The Town is being required to stop delivering sewer to Union County in the very near future. As such, system modifications are needed to provide alternate treatment and disposal for flow in the north and west sewer basins. As noted, the plan for completing these modifications includes diverting all flow to the existing lagoons on the southeast side of town, and constructing a new regional pump station and forcemain to allow for the discharge of all wastewater from the Town to Anson County.

3.0 METHODOLOGY

The system development fees for the Town of Marshville water and sewer systems have been calculated based on methods recommended by the American Water Works Association (AWWA) in the Manual of Water Supply Practices M1, Principles of Water Rates, Fees, and Charges. This manual, as well as House Bill 436, references three basic methods for fee calculation as follows:

- **Buy-In Method:** This method is based on the value of the system's capacity and is useful when sufficient capacity is available for new development.
- **Incremental Cost Method:** This method is based on cost required for system expansion to serve new development, and is useful when little or no capacity is available. The fee is based on the cost of components needed to serve new development.
- **Combined Approach:** This method is useful when a system has capacity for development in a portion of the system components, but improvements are needed in other areas.

For the Town of Marshville, we have determined that the Buy-In Method is most appropriate for the water system, and the combined approach is most appropriate for the sewer system development fees. As required by the house bill, the system development fee calculation includes a revenue credit to prevent new rate payers from being charged twice for system capacity. The legislation requires the revenue credit to, "reflect a deduction of either the outstanding debt principal or the present value of projected water and sewer revenues received by the local governmental unit for the capital improvements necessitated by and attributable to such new development, anticipated over the course of the planning horizon". In addition, the calculated revenue credit for future work must not be less than 25% of the aggregate cost of the capital improvements. For the current analysis, the revenue credit is equal to 25% of the aggregate cost for future work in the incremental cost method.

3.1 Water System Development Fee

As noted, the buy-in method was used to determine the appropriate system development fee for the water system. System components included in the determination included the treated water transmission mains, county interconnections, booster pump station, and elevated storage. The process of calculating the system development fee included developing an inventory of system components and assigning a value to each component. The component cost was determined by estimating the replacement cost of a new component with equal capacity and deducting depreciation. Component depreciation was calculated using the straight-line depreciation based on estimated remaining life with no salvage value.

After determining the depreciated value, deductions were applied for grant or other contributions and the required revenue credit. Deductions for grant funding were based on the percentage of grant funding obtained for the original construction project. The

revenue credit deduction is equal to the outstanding debt principal. The following table summarizes the maximum allowable system development fee related to water system components as a cost per gallon of total capacity. Note that available capacity for the water system is stated as a maximum day usage capacity. As such, the estimated maximum daily usage per ERU used to determine the total fee. Detailed estimates for water system component are included in **Appendix A**.

Table 1: Water System Development Fee Summary

System Component	Estimated Total Replacement Value	Remaining Life (%)¹	Depreciated Value	% Eligible for System Development Fee²	Eligible Value for SDF
Booster Pump Station	\$1,262,562.50	100%	\$1,262,562.50	100%	\$1,262,562.50
8-inch Water Transmission Main	\$6,574,718.75	52%	\$3,447,175.12	100%	\$3,447,345.60
6-inch Water Transmission Main	\$5,632,812.50	64%	\$3,600,453.03	100%	\$3,600,453.03
Elevated Storage Tank	\$2,500,000.00	36%	\$900,00.00	100%	\$900,000.00
Two Anson County Water Interconnections	\$512,500.00	33%	\$169,125.00	100%	\$169,125.00
Total System Development Value					\$9,379,486.13
Outstanding Debt Principal					\$1,482,147.29
Adjusted Value ³					\$7,897,338.84
Cost per Gallon (0.80 MGD Capacity)					\$9.87
System Development Fee per ERU (@225 GPD / Unit)					\$3,948.00

¹ The estimated remaining life is based on time of construction and/or current condition.

¹ Based on estimated age and typical service life based on material.

² Reflects the deduction for grant and other contributions to construction.

3.2 Sewer System Development Fee

The calculation of the sewer system development fee was completed using a combination of the Buy-In Method and Incremental Cost Method. Ultimately, the fee is based on the value of available capacity in critical pump stations, forcemains, and gravity outfalls as well as the value of system improvements needed for future capacity.

3.2.1 Sewer Buy-In Method

The portion of the total sewer system development fee attributable to the buy-in method was calculated as described for the water system fee. The current-day replacement cost of new components of equal capacity was determined less depreciation. In addition, the percentage of grant or other outside funding was

deducted, and a revenue credit was applied equal to the current outstanding debt principal. The following table provides a summary of the sewer system development fee calculation. Detailed estimates for sewer system components are provided in Appendix B.

Table 2: Sewer System Development Fee Buy-In Method Summary

<i>Buy-In Method for Cost of Existing Capacity</i>					
System Component	Estimated Total Replacement Value	Remaining Useful Life	Depreciated Value	% Eligible for System Development Fee²	Eligible Value for SDF
Booster Pump Station	\$1,262,562.50	100%	\$1,262,562.50	100%	\$1,262,562.50
8-inch Water Transmission Main	\$6,574,718.75	52%	\$3,447,175.12	100%	\$3,447,345.60
6-inch Water Transmission Main	\$5,632,812.50	64%	\$3,600,453.03	100%	\$3,600,453.03
Elevated Storage Tank	\$2,500,000.00	36%	\$900,000.00	100%	\$900,000.00
Two Anson County Water Interconnections	\$512,500.00	33%	\$169,125.00	100%	\$169,125.00
Total System Development Value					\$9,379,486.13
Outstanding Debt Principal					\$1,482,147.29
Adjusted Value					\$7,897,338.84
Cost per Gallon (0.8 MGD Max Day Capacity)					\$9.87
System Development Fee (per ERU @ 225 GPD per Unit)					\$3,948.00

¹ The estimated remaining life is based on time of construction and/or current condition.

² Reflects the deduction for grant and other contributions to construction.

3.2.1 Incremental Cost Method

The value of planned improvements to major pumping and treatment components were included in the determination of system values to be applied by the incremental cost method. It was assumed that all proposed improvements would be constructed as part of one construction project, and funding would be a combination of existing grant funding and a 20-year loan with an interest rate of 4.50%.

A revenue credit equal to 25% of the future capacity development value since that amount was higher than the present value of new customer debt payments. The revenue credit calculation is included in **Appendix B**.

Table 3: Sewer System Development Fee Incremental Cost Method Summary

<i>Incremental Cost Method for Future Capacity Development</i>					
System Component	Estimated Total Replacement Value	Estimated Remaining Life (%)	Depreciated Value	% Eligible for System Development Fee	Eligible Value for SDF
Future North Basin Pump Station	\$1,250,000.00	100%	\$1,250,000.00	30%	\$375,000.00
Future North Basin Force Main	\$2,321,625.00	100%	\$2,321,625.00	30%	\$696,487.50
Future West Basin Pump Station	\$1,062,500.00	100%	\$1,062,500.00	30%	\$318,750.00
Future West Basin Force Main	\$1,142,687.50	100%	\$1,142,687.50	30%	\$342,806.25
Future Pump Station at Anson County Line	\$1,875,000.00	100%	\$1,875,000.00	30%	\$562,500.00
Future Parallel Forcemain to Anson County	\$5,540,500.00	100%	\$5,540,500.00	30%	\$1,662,150.00
Future Capital Improvement Projects (5-Years)	\$2,333,890.00	100%	\$2,333,890.00	100%	\$2,333,890.00
Total Capacity Development Value					\$6,291,583.75
Credit (Present Value of Debt Principal Payments or 25% Whichever is Greater)					\$1,572,895.94
Adjusted Value					\$4,718,687.81

3.2.1 Combined Sewer System Development Fee

In applying the combination of the buy-in and incremental cost methods, it is necessary to calculate the allowable system development fee as a weighted average of existing and future capacity. Note that for the sewer system, capacity is given as the amount available for average daily usage. As such, the estimated flow per ERU is given as the expected average daily flow. The following table summarizes the sewer system development fee for the combined method.

Table 4: Combined Sewer System Development Fee

<i>Combined Cost Method for Total System Development Fee</i>		
Capacity Item	Value	Capacity
Existing Capacity	\$7,458,761.14	200,000.00
Future Additional Capacity	\$4,718,687.81	600,000.00
Total	\$12,177,448.95	800,000.00
Unit Value of Combined Capacity (\$/gallon)	\$15.22	
Capacity Development Fee per ERU	\$3,424.50	

4.0 FEE ADJUSTMENT, COLLECTION, AND USE

As noted in the tables above, the water and sewer system developments fees should not exceed \$9.87 per gallon for the water system and \$15.22 per gallon for the sewer system. The following table provides the system development fees for a typical, three-bedroom residential dwelling unit.

Table 5: System Development Fee's for Residential Customers

Development Fees	Capacity Allocation	Capacity Cost per Gallon (Maximum)	Total Fee
Water System	400 ¹	\$9.87	\$3,948.00
Sewer System	225 ²	\$15.22	\$3,424.50
Total (Maximum Allowable)			\$7,372.50

¹ Based on DEQ recommendation for maximum daily customer usage.

² Based on 75 GPD / Bedroom noted in NCDEQ Minimum Design Criteria for sewer systems.

4.1 Fee Adjustment for Non-Residential Usage

The fees noted above would be typical for a normal residential unit, but adjustments would need to be made for customers needing more or less capacity. The two most common approaches are basing the charge on the meter size or permitted flow. Each of these methods is described below.

Meter Size: This approach is common and relatively easy to implement and includes an adjustment to the baseline fee based on the ratio of the increase in capacity for larger meters. The ratio would be based on meter equivalencies published by AWWA. The following table summarizes the fee schedule using this method for meter sizes through 4-inch and the baseline fees shown in Table 5.

Table 6: Fee Adjustments Based on Meter Size & Type

Meter Size	Maximum-Rated Safe Flow (gpm)	Meter equivalent Ratio	Sewer CDF	Water CDF	Total
3/4" Displacement	30	1.0	\$3,424.50	\$3,948.00	\$7,372.50
1" Displacement	50	1.7	\$5,707.50	\$6,580.00	\$12,287.50
1-1/2" Displacement	100	3.3	\$11,415.00	\$13,160.00	\$24,575.00
2" Displacement	160	5.3	\$18,264.00	\$21,056.00	\$39,320.00
3" Singlejet	320	10.7	\$36,528.00	\$42,112.00	\$78,640.00
3" Compound, Class 1	320	10.7	\$36,528.00	\$42,112.00	\$78,640.00
3" Turbine, Class 1	350	11.7	\$39,952.50	\$46,060.00	\$86,012.50
4" Singlejet	500	16.7	\$57,075.00	\$65,800.00	\$122,875.00
4" Compound, Class 1	500	16.7	\$57,075.00	\$65,800.00	\$122,875.00
4" Turbine, Class 1	630	21.0	\$71,914.50	\$82,908.00	\$154,822.50

Permitted Flow: This approach would use the NCDEQ design daily flow requirements for the proposed development to determine the appropriate system development fee. If the Town chooses to calculate fees in this way, the permitted flow should be based on a combination of the Wastewater Design Flow Rates given in 15A NCAC 02T .0114 and daily water flow requirements given in 15A NCAC 18C .0409. The total daily design flow of the proposed development would be multiplied by the unit cost for capacity adopted by the Town.

This method is not as simple as the approach based on meter size and can be problematic to implement without clearly defined uses that correspond to the referenced design flow tables. Based on experience with other systems, we would recommend setting fees based on the needed meter size.

4.2 Timing for Collection of System Development Fees

The house bill places restrictions on when system development fees are collected and how the fees can be utilized. For new developments, fees can be collected either at the time of plat recordation or when the Town commits to providing water or sewer service. For all other new development, the Bill stipulates that the fee be collected at the time of application for service.

4.3 Use of System Development Fees

The house bill also restricts usage of system development fees. SDF's calculated using the incremental cost method or marginal cost method can only be used to pay for cost associated with construction of the associated capital improvements, including construction contracts, surveying, engineering, and land acquisition. System development fees can also be used to pay principal and interest on bonds, notes, or other obligations issued for these costs. If no capital improvements are planned for within five years, the fees collected can be used to pay principal and interest on bonds, notes, or other obligations issued to construct or acquire existing capital improvements.

Revenue from system development fees calculated using the buy-in method may be used for previously completed capital improvements that have excess capacity, and for capital rehabilitation projects.

All revenue from system development fees must be accounted for by means of a capital reserve fund established in accordance with Part 2 of Article 3 of Chapter 159 of the General Statutes and limited as to expenditure in accordance with Section 162A-211 of House Bill 436.

A copy of House Bill 436 is included in **Appendix C** for further review by the Town and legal counsel.

5.0 CONCLUSION AND RECOMMENDATIONS

Based on the value of existing system components and future cost to be incurred to meet demands for growth, we recommend that the Town of Marshville adopt a schedule for assessment of system development fees. The fees given in this report are the maximum allowable that could be adopted, and the Town may set the fees less than these amounts. In addition, we recommend that the Town update this analysis and the system development fee schedule every five years at a minimum. It should be noted that the noted fees do not account for system development fees from Anson County.

We recommend adopting a fee schedule based on the water meter size needed. Table 6 provides a summary of the maximum allowable fees for various developments. We appreciate the opportunity to assist the Town with this analysis and can be available for additional discussion at the Town's convenience.

**APPENDIX A: WATER SYSTEM COMPONENT
DETAILED ESTIMATES**

Water SDF Worksheet

<i>Buy-In Method for Cost of Existing Capacity</i>					
System Component	Estimated Total Replacement Value	Remaining Useful Life	Depreciated Value	% Eligible for System Development Fee²	Eligible Value for SDF
Booster Pump Station	\$1,262,562.50	100%	\$1,262,562.50	100%	\$1,262,562.50
8-inch Water Transmission Main	\$6,574,718.75	52%	\$3,447,175.12	100%	\$3,447,345.60
6-inch Water Transmission Main	\$5,632,812.50	64%	\$3,600,453.03	100%	\$3,600,453.03
Elevated Storage Tank	\$2,500,000.00	36%	\$900,000.00	100%	\$900,000.00
Two Anson County Water Interconnections	\$512,500.00	33%	\$169,125.00	100%	\$169,125.00
Total System Development Value					\$9,379,486.13
Outstanding Debt Principal					\$1,482,147.29
Adjusted Value					\$7,897,338.84
Cost per Gallon (0.8 MGD Max Day Capacity)					\$9.87
System Development Fee (per ERU @ 225 GPD per Unit)					\$3,948.00

Booster Pump Station Replacement Estimate

Description	Qty./Unit		Unit Cost	Extended Price
Piping, Gates, and Valves	1	LS	\$50.00	\$50.00
Pumps & Controls	1	LS	\$550,000.00	\$550,000.00
Generator & ATS	1	LS	\$120,000.00	\$120,000.00
SCADA & Electrical	1	LS	\$140,000.00	\$140,000.00
Building & Sitework	1	LS	\$200,000.00	\$200,000.00
Total Construction				\$1,010,050.00
Construction Contingency				\$101,005.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)				\$151,507.50
Total Estimated Replacement Value				\$1,262,562.50

6-inch Transmission Water Main Replacement Estimate

Description	Qty./Unit		Unit Cost	Extended Price
Mobilization	1	ls	\$200,000.00	\$200,000.00
6" C-900 PVC Water Main	17,750	lf	\$90.00	\$1,597,500.00
6" DIP Water Main	1,500	lf	\$110.00	\$165,000.00
Valves	18	ea	\$2,500.00	\$45,000.00
Bends & Fittings	30	ea	\$1,500.00	\$45,000.00
12" Casing Installed by Bore & Jack	500	lf	\$1,400.00	\$700,000.00
6" Fusible PVC Installed by Directional Bore	1,500	lf	\$850.00	\$1,275,000.00
Asphalt for Roadway Repair	1,250	sy	\$125.00	\$156,250.00
Concrete for Driveway Repair	450	sy	\$150.00	\$67,500.00
Gravel for Driveway Repair	400	tns	\$60.00	\$24,000.00
Cleanup, Testing, Seeding, Erosion Control	19,250	lf	\$12.00	\$231,000.00
Total Construction				\$4,506,250.00
Contingency				\$450,625.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)				\$675,937.50
Sub-Total Estimated Replacement Value				\$5,632,812.50

8-inch Transmission Water Main Replacement Estimate

Description	Qty./Unit		Unit Cost	Extended Price
Mobilization	1	ls	\$250,000.00	\$250,000.00
8" C-900 PVC Water Main	23,075	lf	\$105.00	\$2,422,875.00
8" DIP Water Main	1,000	lf	\$125.00	\$125,000.00
Valves	8	ea	\$3,500.00	\$28,000.00
Bends & Fittings	20	ea	\$1,750.00	\$35,000.00
16" Casing Installed by Bore & Jack	350	lf	\$1,600.00	\$560,000.00
8" Fusible PVC Installed by Directional Bore	1,200	lf	\$950.00	\$1,140,000.00
Asphalt for Roadway Repair	2,500	sy	\$125.00	\$312,500.00
Concrete for Driveway Repair	250	sy	\$150.00	\$37,500.00
Gravel for Driveway Repair	1,000	tns	\$60.00	\$60,000.00
Cleanup, Testing, Seeding, Erosion Control	24,075	lf	\$12.00	\$288,900.00
Total Construction				\$5,259,775.00
Contingency				\$525,977.50
Administrative Cost (Design, Inspection, Contract Administration, Permitting,				\$788,966.25
Sub-Total Estimated Replacement Value				\$6,574,718.75

Total 6-inch & 8-inch Transmission Water Main Replacement Cost	\$12,207,531.25
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Elevated Tank Replacement Estimate

Description	Qty./Unit		Unit Cost	Extended Price
0.250 MG Elevated Storage Tank	1	LS	\$1,650,000.00	\$1,650,000.00
Site Piping, Fence, Access Road, & Control Valves in	1	LS	\$250,000.00	\$250,000.00
SCADA & Electrical	1	LS	\$75,000.00	\$75,000.00
Erosion Control	1	LS	\$25,000.00	\$25,000.00
Total Construction				\$2,000,000.00
Construction Contingency				\$200,000.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)				\$300,000.00
Total Estimated Replacement Value				\$2,500,000.00

Two Anson County Water Interconnections Replacement Estimate

Description	Qty./Unit		Unit Cost	Extended Price
Flow Meter, Valves, Piping, Vault	2	EA	\$90,000.00	\$180,000.00
Site Piping, Fence, Access Road, & Control Valves in	2	EA	\$60,000.00	\$120,000.00
SCADA & Electrical	2	EA	\$40,000.00	\$80,000.00
Erosion Control	2	EA	\$15,000.00	\$30,000.00
Total Construction				\$410,000.00
Construction Contingency				\$41,000.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)				\$61,500.00
Total Estimated Replacement Value				\$512,500.00

**APPENDIX B: SEWER SYSTEM COMPONENT DETAILED ESTIMATES
& REVENUE CREDIT CALCULATION**

Sewer Capacity Development Fee Worksheet

<i>Buy-In Method for Cost of Existing Capacity</i>					
System Component	Estimated Total Replacement Value	Estimated Remaining Life (%)¹	Depreciated Value	% Eligible for System Development Fee²	Eligible Value for SDF
South Basin FM	\$2,433,150.00	70%	\$1,703,205.00	60%	\$1,021,923.00
Anson County PS	\$1,312,500.00	70%	\$918,750.00	60%	\$551,250.00
Forcemain to Anson County	\$4,478,000.00	85%	\$3,806,300.00	60%	\$2,283,780.00
North Basin 8" & 10" Sewer Outfall	\$3,771,975.00	55%	\$2,066,279.21	100%	\$2,066,279.21
South Basin 8", 10", & 12" Sewer Outfall	\$6,346,625.00	34%	\$2,180,818.89	100%	\$2,180,818.89
Total Capacity Development Value					\$8,104,051.10
Credit (Outstanding Debt Principal)					\$645,289.96
Adjusted Value					\$7,458,761.14

<i>Incremental Cost Method for Future Capacity Development</i>					
System Component	Estimated Total Replacement Value	Estimated Remaining Life (%)	Depreciated Value	% Eligible for System Development Fee	Eligible Value for SDF
Future North Basin Pump Station	\$1,250,000.00	100%	\$1,250,000.00	30%	\$375,000.00
Future North Basin Force Main	\$2,321,625.00	100%	\$2,321,625.00	30%	\$696,487.50
Future West Basin Pump Station	\$1,062,500.00	100%	\$1,062,500.00	30%	\$318,750.00
Future West Basin Force Main	\$1,142,687.50	100%	\$1,142,687.50	30%	\$342,806.25
Future Pump Station at Anson County Line	\$1,875,000.00	100%	\$1,875,000.00	30%	\$562,500.00
Future Parallel Forcemain to Anson County	\$5,540,500.00	100%	\$5,540,500.00	30%	\$1,662,150.00
Future Capital Improvement Projects (5-Years)	\$2,333,890.00	100%	\$2,333,890.00	100%	\$2,333,890.00
Total Capacity Development Value					\$6,291,583.75
Credit (Present Value of Debt Principal Payments or 25% Whichever is Greater)					\$1,572,895.94
Adjusted Value					\$4,718,687.81

<i>Combined Cost Method for Total System Development Fee</i>		
Capacity Item	Value	Capacity
Existing Capacity	\$7,458,761.14	200,000.00
Future Additional Capacity	\$4,718,687.81	600,000.00
Total	\$12,177,448.95	800,000.00
Unit Value of Combined Capacity	\$15.22	
Capacity Development Fee per ERU (225 GPD per 3 bedroom unit)	\$3,424.50	

Existing South Basin FM with Proposed North Basin FM Connection

Item Description	Qty		Unit Price	Total Value
Mobilization	1	ls	\$70,000.00	\$70,000.00
6" PVC Forcemain	6,870	lf	\$90.00	\$618,300.00
6" DIP Forcemain with Epoxy Lining	800	lf	\$140.00	\$112,000.00
Valves	4	ea	\$2,500.00	\$10,000.00
Air Relief Valve in Manhole	5	ea	\$10,000.00	\$50,000.00
Bends & Fittings	12	ea	\$1,500.00	\$18,000.00
12" Casing Installed by Bore & Jack	300	lf	\$1,400.00	\$420,000.00
6" Fusible PVC Installed by Directional Bore	350	lf	\$850.00	\$297,500.00
Connection to Existing System	1	ea	\$10,000.00	\$10,000.00
Open Cut & Patch DOT Roadway	50	sy	\$150.00	\$7,500.00
Mill & Overlay DOT Roadway	125	sy	\$60.00	\$7,500.00
Asphalt Roadway Repair	1,500	sy	\$125.00	\$187,500.00
Concrete Driveway Repair	200	sy	\$160.00	\$32,000.00
Gravel Driveway Repair	300	tns	\$60.00	\$18,000.00
Cleanup and Testing	8,020	lf	\$5.00	\$40,100.00
Erosion Control	8,020	lf	\$6.00	\$48,120.00
Total Estimated Construction Cost				\$1,946,520.00
Contingency				\$194,652.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)				\$291,978.00
Total Estimated Replacement Value				\$2,433,150.00

Existing Anson Regional Pump Station

Item Description	Total Value
Concrete Structures	\$225,000.00
Valves and Piping	\$125,000.00
Pumps and Controls	\$450,000.00
Electrical	\$100,000.00
Generator	\$75,000.00
Grading & Site Work	\$50,000.00
Cleanup & Erosion Control	\$25,000.00
Total Estimated Construction Cost	\$1,050,000.00
Contingency	\$105,000.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)	\$157,500.00
Total Estimated Replacement Value	\$1,312,500.00

Discharge Forcemain from Anson Regional PS to Anson County Forcemain

Description	Qty./Unit	Unit Cost	Extended Price
Mobilization	1 ls	\$120,000.00	\$120,000.00
6" PVC Forcemain	19,400 lf	\$90.00	\$1,746,000.00
6" DIP Forcemain	1,000 lf	\$140.00	\$140,000.00
Valves	4 ea	\$2,500.00	\$10,000.00
Air Relief Valve in Manhole	9 ea	\$10,000.00	\$90,000.00
Bends & Fittings	8 ea	\$1,500.00	\$12,000.00
12" Casing Installed by Bore & Jack	200 lf	\$1,400.00	\$280,000.00
6" Fusible PVC Installed by Directional Bore	1,000 lf	\$850.00	\$850,000.00
Connection to Existing System	1 ea	\$10,000.00	\$10,000.00
Asphalt Roadway Repair	200 sy	\$125.00	\$25,000.00
Concrete Driveway Repair	250 sy	\$160.00	\$40,000.00
Gravel Driveway Repair	400 tns	\$60.00	\$24,000.00
Cleanup and Testing	21,400 lf	\$5.00	\$107,000.00
Erosion Control	21,400 lf	\$6.00	\$128,400.00
Total Estimated Construction Cost			\$3,582,400.00
Contingency			\$358,240.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)			\$537,360.00
Total Estimated Replacement Value			\$4,478,000.00

10-inch North Basin Gravity Outfall

Item Description	Qty		Unit Price	Extended Price
Mobilization	1	ls	\$85,000.00	\$85,000.00
10" PVC Sanitary Sewer	4,710	lf	\$260.00	\$1,224,600.00
10" DI Sanitary Sewer	200	lf	\$290.00	\$58,000.00
8" PVC Sanitary Sewer	2,400	lf	\$225.00	\$540,000.00
8" DI Sanitary Sewer	500	lf	\$270.00	\$135,000.00
4' Diameter Manholes	33	ea	\$7,500.00	\$247,500.00
20" Steel Casing Installed by Bore & Jack	125	lf	\$1,750.00	\$218,750.00
16" Steel Casing Installed by Bore & Jack	250	lf	\$1,500.00	\$375,000.00
Open Cut & Patch DOT Roadway	50	sy	\$150.00	\$7,500.00
Mill & Overlay DOT Roadway	125	sy	\$60.00	\$7,500.00
Asphalt Roadway Repair	250	sy	\$125.00	\$31,250.00
Clearing & Grubbing	1	ls	\$25,000.00	\$25,000.00
Cleanup, Testing, Erosion Control	7,810	lf	\$8.00	\$62,480.00
Total Estimated Construction Cost				\$3,017,580.00
Contingency				\$301,758.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)				\$452,637.00
Total Estimated Replacement Value				\$3,771,975.00

10-inch & 12-inch South Basin Gravity Outfall

Item Description	Qty		Unit Price	Extended Price
Mobilization	1	ls	\$120,000.00	\$120,000.00
12" PVC Sanitary Sewer	6,100	lf	\$275.00	\$1,677,500.00
12" DI Sanitary Sewer	750	lf	\$300.00	\$225,000.00
10" PVC Sanitary Sewer	950	lf	\$260.00	\$247,000.00
10" DI Sanitary Sewer	200	lf	\$290.00	\$58,000.00
8" PVC Sanitary Sewer	4,500	lf	\$225.00	\$1,012,500.00
8" DI Sanitary Sewer	350	lf	\$270.00	\$94,500.00
4' Diameter Manholes	49	ea	\$7,500.00	\$367,500.00
24" Steel Casing Installed by Bore & Jack	200	lf	\$1,800.00	\$360,000.00
16" Steel Casing Installed by Bore & Jack	500	lf	\$1,500.00	\$750,000.00
Open Cut & Patch DOT Roadway	50	sy	\$150.00	\$7,500.00
Mill & Overlay DOT Roadway	125	sy	\$60.00	\$7,500.00
Asphalt Roadway Repair	100	sy	\$125.00	\$12,500.00
Clearing & Grubbing	1	ls	\$35,000.00	\$35,000.00
Cleanup, Testing, Erosion Control	12,850	lf	\$8.00	\$102,800.00
Total Estimated Construction Cost				\$5,077,300.00
Contingency				\$507,730.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)				\$761,595.00
Total Estimated Replacement Value				\$6,346,625.00

Proposed North Basin Pump Station

Item Description	Total Value
Concrete Structures	\$225,000.00
Valves and Piping	\$100,000.00
Pumps and Controls	\$435,000.00
Electrical	\$100,000.00
Generator	\$75,000.00
Grading & Site Work	\$45,000.00
Cleanup & Erosion Control	\$20,000.00
Total Estimated Construction Cost	\$1,000,000.00
Contingency	\$100,000.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)	\$150,000.00
Total Estimated Replacement Value	\$1,250,000.00

Proposed 6-inch Discharge Forcemain from North Basin PS to South Basin FM

Description	Qty./Unit	Unit Cost	Extended Price
Mobilization	1 ls	\$55,000.00	\$55,000.00
6" PVC Forcemain	5,700 lf	\$90.00	\$513,000.00
6" DIP Forcemain	900 lf	\$140.00	\$126,000.00
Valves	6 ea	\$2,500.00	\$15,000.00
Air Relief Valve in Manhole	8 ea	\$10,000.00	\$80,000.00
Bends & Fittings	10 ea	\$1,500.00	\$15,000.00
Connection to Existing System	1 ea	\$10,000.00	\$10,000.00
12" Steel Casing Installed by Bore & Jack	150 lf	\$1,400.00	\$210,000.00
6" Fusible PVC Installed by Directional Bore	700 lf	\$850.00	\$595,000.00
Open Cut & Patch DOT Roadway	100 sy	\$150.00	\$15,000.00
Mill & Overlay DOT Roadway	250 sy	\$60.00	\$15,000.00
Asphalt Roadway Repair	400 sy	\$125.00	\$50,000.00
Concrete Driveway Repair	450 sy	\$160.00	\$72,000.00
Gravel Driveway Repair	100 tns	\$60.00	\$6,000.00
Cleanup and Testing	7,300 lf	\$5.00	\$36,500.00
Erosion Control	7,300 lf	\$6.00	\$43,800.00
Total Estimated Construction Cost			\$1,857,300.00
Contingency			\$185,730.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)			\$278,595.00
Total Estimated Replacement Value			\$2,321,625.00

Proposed West Basin Pump Station

Item Description	Total Value
Concrete Structures	\$175,000.00
Valves and Piping	\$85,000.00
Pumps and Controls	\$370,000.00
Electrical	\$90,000.00
Generator	\$75,000.00
Grading & Site Work	\$35,000.00
Cleanup & Erosion Control	\$20,000.00
Total Estimated Construction Cost	\$850,000.00
Contingency	\$85,000.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)	\$127,500.00
Total Estimated Replacement Value	\$1,062,500.00

Proposed 6-inch Discharge Forcemain from West Basin PS to South Basin Outfall

Description	Qty./Unit	Unit Cost	Extended Price
Mobilization	1 ls	\$40,000.00	\$40,000.00
6" PVC Forcemain	3,800 lf	\$90.00	\$342,000.00
6" DIP Forcemain	350 lf	\$140.00	\$49,000.00
Valves	4 ea	\$3,500.00	\$14,000.00
Air Relief Valve in Manhole	6 ea	\$10,000.00	\$60,000.00
Bends & Fittings	8 ea	\$1,500.00	\$12,000.00
12" Casing Installed by Bore & Jack	200 lf	\$1,400.00	\$280,000.00
Connection to Existing System	1 ea	\$10,000.00	\$10,000.00
Asphalt Roadway Repair	300 sy	\$125.00	\$37,500.00
Concrete Driveway Repair	150 sy	\$160.00	\$24,000.00
Cleanup and Testing	4,150 lf	\$5.00	\$20,750.00
Erosion Control	4,150 lf	\$6.00	\$24,900.00
Total Estimated Construction Cost			\$914,150.00
Contingency			\$91,415.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)			\$137,122.50
Total Estimated Replacement Value			\$1,142,687.50

New Anson Regional Pump Station

Item Description	Total Value
Concrete Structures	\$275,000.00
Valves and Piping	\$175,000.00
Pumps and Controls	\$600,000.00
Electrical	\$150,000.00
Generator	\$125,000.00
Grading & Site Work	\$100,000.00
Cleanup & Erosion Control	\$75,000.00
Total Estimated Construction Cost	\$1,500,000.00
Contingency	\$150,000.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)	\$225,000.00
Total Estimated Replacement Value	\$1,875,000.00

Discharge Forcemain from Anson Regional PS to Anson County Forcemain

Description	Qty./Unit	Unit Cost	Extended Price
Mobilization	1 ls	\$120,000.00	\$120,000.00
10" PVC Forcemain	19,400 lf	\$125.00	\$2,425,000.00
10" DIP Forcemain	1,000 lf	\$175.00	\$175,000.00
Valves	4 ea	\$4,000.00	\$16,000.00
Air Relief Valve in Manhole	9 ea	\$10,000.00	\$90,000.00
Bends & Fittings	8 ea	\$2,500.00	\$20,000.00
20" Casing Installed by Bore & Jack	200 lf	\$1,800.00	\$360,000.00
10" Fusible PVC Installed by Directional Bore	1,000 lf	\$900.00	\$900,000.00
Connection to Existing System	1 ea	\$10,000.00	\$10,000.00
Asphalt Roadway Repair	200 sy	\$125.00	\$25,000.00
Concrete Driveway Repair	250 sy	\$160.00	\$40,000.00
Gravel Driveway Repair	400 tns	\$60.00	\$24,000.00
Cleanup and Testing	21,400 lf	\$5.00	\$107,000.00
Erosion Control	21,400 lf	\$6.00	\$128,400.00
Total Estimated Construction Cost			\$4,440,400.00
Contingency			\$444,040.00
Administrative Cost (Design, Inspection, Contract Administration, Permitting, Legal, etc.)			\$661,619.60
Total Estimated Replacement Value			\$5,546,059.60

Present Value of Projected Debt Payment by Future Customers

Customer Base Growth Rate	1.62%
Total Estimated Project Cost	\$6,291,583.75
Interest Rate	4.500%
Annual Debt Service Payment	\$250,633.00
Present Value of New Customer Payments	\$429,363.52

Year	Customers	New Customers	Debt Service Payment Per Customer	Total Payments by Future Customers	Present Value of Payments by Future Customers	Payments by Existing Customer Base
2022	950		\$263.82			
2023	965	15	\$259.62	\$3,989.46	\$3,817.66	\$181,737.34
2024	981	31	\$255.49	\$7,915.42	\$7,248.38	\$178,844.53
2025	997	47	\$251.43	\$11,778.88	\$10,321.79	\$175,997.77
2026	1,013	63	\$247.42	\$15,580.85	\$13,065.50	\$173,196.32
2027	1,029	79	\$243.48	\$19,322.30	\$15,505.20	\$170,439.46
2028	1,046	96	\$239.61	\$23,004.20	\$17,664.82	\$167,726.48
2029	1,063	113	\$235.80	\$26,627.49	\$19,566.63	\$165,056.69
2030	1,080	130	\$232.04	\$30,193.10	\$21,231.34	\$162,429.40
2031	1,098	148	\$228.35	\$33,701.96	\$22,678.20	\$159,843.92
2032	1,115	165	\$224.71	\$37,154.97	\$23,925.11	\$157,299.60
2033	1,133	183	\$221.14	\$40,553.01	\$24,988.71	\$154,795.78
2034	1,152	202	\$217.62	\$43,896.97	\$25,884.45	\$152,331.81
2035	1,170	220	\$214.15	\$47,187.69	\$26,626.68	\$149,907.07
2036	1,189	239	\$210.74	\$50,426.04	\$27,228.69	\$147,520.91
2037	1,209	259	\$207.39	\$53,612.84	\$27,702.85	\$145,172.75
2038	1,228	278	\$204.09	\$56,748.92	\$28,060.60	\$142,861.95
2039	1,248	298	\$200.84	\$59,835.07	\$28,312.54	\$140,587.94
2040	1,268	318	\$197.64	\$62,872.11	\$28,468.51	\$138,350.13
2041	1,289	339	\$194.50	\$65,860.80	\$28,537.60	\$136,147.94
2042	1,309	359	\$191.40	\$68,801.91	\$28,528.22	\$133,980.80

APPENDIX C: HOUSE BILL 436

GENERAL ASSEMBLY OF NORTH CAROLINA
SESSION 2017

HOUSE BILL 436
RATIFIED BILL

AN ACT TO PROVIDE FOR UNIFORM AUTHORITY TO IMPLEMENT SYSTEM
DEVELOPMENT FEES FOR PUBLIC WATER AND SEWER SYSTEMS IN NORTH
CAROLINA AND TO CLARIFY THE APPLICABLE STATUTE OF LIMITATIONS.

The General Assembly of North Carolina enacts:

SECTION 1. Chapter 162A of the General Statutes is amended by adding a new Article to read:

"Article 8.

"System Development Fees.

"§ 162A-200. Short title.

This Article shall be known and may be cited as the "Public Water and Sewer System Development Fee Act."

"§ 162A-201. Definitions.

The following definitions apply in this Article:

- (1) Capital improvement. – A planned facility or expansion of capacity of an existing facility other than a capital rehabilitation project necessitated by and attributable to new development.
- (2) Capital rehabilitation project. – Any repair, maintenance, modernization, upgrade, update, replacement, or correction of deficiencies of a facility, including any expansion or other undertaking to increase the preexisting level of service for existing development.
- (3) Existing development. – Land subdivisions, structures, and land uses in existence at the start of the written analysis process required by G.S. 162A-205, no more than one year prior to the adoption of a system development fee.
- (4) Facility. – A water supply, treatment, storage, or distribution facility, or a wastewater collection, treatment, or disposal facility, including for reuse or reclamation of water, owned or operated, or to be owned or operated, by a local governmental unit and land associated with such facility.
- (5) Local governmental unit. – Any political subdivision of the State that owns or operates a facility, including those owned or operated pursuant to local act of the General Assembly or pursuant to Part 2 of Article 2 of Chapter 130A, Article 15 of Chapter 153A, Article 16 of Chapter 160A, or Articles 1, 4, 5, 5A, or 6 of Chapter 162A of the General Statutes.
- (6) New development. – Any of the following occurring after the date a local government begins the written analysis process required by G.S. 162A-205, no more than one year prior to the adoption of a system development fee, which increases the capacity necessary to serve that development:
 - a. The subdivision of land.



- b. The construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure which increases the number of service units.
 - c. Any use or extension of the use of land which increases the number of service units.
- (7) Service. – Water or sewer service, or water and sewer service, provided by a local governmental unit.
- (8) Service unit. – A unit of measure, typically an equivalent residential unit, calculated in accordance with generally accepted engineering or planning standards.
- (9) System development fee. – A charge or assessment for service imposed with respect to new development to fund costs of capital improvements necessitated by and attributable to such new development, to recoup costs of existing facilities which serve such new development, or a combination of those costs, as provided in this Article. The term includes amortized charges, lump-sum charges, and any other fee that functions as described by this definition regardless of terminology. The term does not include any of the following:
 - a. A charge or fee to pay the administrative, plan review, or inspection costs associated with permits required for development.
 - b. Tap or hookup charges for the purpose of reimbursing the local governmental unit for the actual cost of connecting the service unit to the system.
 - c. Availability charges.
 - d. Dedication of capital improvements on-site, adjacent, or ancillary to a development absent a written agreement providing for credit or reimbursement to the developer pursuant to G.S. 153A-280, 153A-451, 160A-320, 160A-499 or Part 3A of Article 18, Chapter 153A or Part 3D of Article 19, Chapter 160A of the General Statutes.
 - e. Reimbursement to the local governmental unit for its expenses in constructing or providing for water or sewer utility capital improvements adjacent or ancillary to the development if the owner or developer has agreed to be financially responsible for such expenses; however, such reimbursement shall be credited to any system development fee charged as set forth in G.S. 162A-207(c).
- (10) System development fee analysis. – An analysis meeting the requirements of G.S. 162A-205.

"§ 162A-202. Reserved.

"§ 162A-203. Authorization of system development fee.

(a) A local governmental unit may adopt a system development fee for water or sewer service only in accordance with the conditions and limitations of this Article.

(b) A system development fee adopted by a local governmental unit under any lawful authority other than this Article and in effect on October 1, 2017, shall be conformed to the requirements of this Article not later than July 1, 2018.

"§ 162A-204. Reserved.

"§ 162A-205. Supporting analysis.

A system development fee shall be calculated based on a written analysis, which may constitute or be included in a capital improvements plan, that:

- (1) Is prepared by a financial professional or a licensed professional engineer qualified by experience and training or education to employ generally accepted accounting, engineering, and planning methodologies to calculate system development fees for public water and sewer systems.
- (2) Documents in reasonable detail the facts and data used in the analysis and their sufficiency and reliability.
- (3) Employs generally accepted accounting, engineering, and planning methodologies, including the buy-in, incremental cost or marginal cost, and combined cost methods for each service, setting forth appropriate analysis as to the consideration and selection of a method appropriate to the circumstances and adapted as necessary to satisfy all requirements of this Article.
- (4) Documents and demonstrates the reliable application of the methodologies to the facts and data, including all reasoning, analysis, and interim calculations underlying each identifiable component of the system development fee and the aggregate thereof.
- (5) Identifies all assumptions and limiting conditions affecting the analysis and demonstrates that they do not materially undermine the reliability of conclusions reached.
- (6) Calculates a final system development fee per service unit of new development and includes an equivalency or conversion table for use in determining the fees applicable for various categories of demand.
- (7) Covers a planning horizon of not less than 10 years nor more than 20 years.
- (8) Is adopted by resolution or ordinance of the local governmental unit in accordance with G.S. 162A-209.

"§ 162A-206. Reserved.

"§ 162A-207. Minimum requirements.

(a) Maximum. – A system development fee shall not exceed that calculated based on the system development fee analysis.

(b) Revenue Credit. – In applying the incremental cost or marginal cost, or the combined cost, method to calculate a system development fee with respect to water or sewer capital improvements, the system development fee analysis must include as part of that methodology a credit against the projected aggregate cost of water or sewer capital improvements. That credit shall be determined based upon generally accepted calculations and shall reflect a deduction of either the outstanding debt principal or the present value of projected water and sewer revenues received by the local governmental unit for the capital improvements necessitated by and attributable to such new development, anticipated over the course of the planning horizon. In no case shall the credit be less than twenty-five percent (25%) of the aggregate cost of capital improvements.

(c) Construction or Contributions Credit. – In calculating the system development fee with respect to new development, the local governmental unit shall credit the value of costs in excess of the development's proportionate share of connecting facilities required to be oversized for use of others outside of the development. No credit shall be applied, however, for water or sewer capital improvements on-site or to connect new development to water or sewer facilities.

"§ 162A-208. Reserved.

"§ 162A-209. Adoption and periodic review.

(a) For not less than 45 days prior to considering the adoption of a system development fee analysis, the local governmental unit shall post the analysis on its Web site and solicit and furnish a means to submit written comments, which shall be considered by the preparer of the analysis for possible modifications or revisions.

(b) After expiration of the period for posting, the governing body of the local governmental unit shall conduct a public hearing prior to considering adoption of the analysis with any modifications or revisions.

(c) The local governmental unit shall publish the system development fee in its annual budget or rate plan or ordinance. The local governmental unit shall update the system development fee analysis at least every five years.

"§ 162A-210. Reserved.

"§ 162A-211. Use and administration of revenue.

(a) Revenue from system development fees calculated using the incremental cost method or marginal cost method, exclusively or as part of the combined cost method, shall be expended only to pay:

(1) Costs of constructing capital improvements including, and limited to, any of the following:

a. Construction contract prices.

b. Surveying and engineering fees.

c. Land acquisition cost.

d. Principal and interest on bonds, notes, or other obligations issued by or on behalf of the local governmental unit to finance any costs for an item listed in sub-subdivisions a. through c. of this subdivision.

(2) Professional fees incurred by the local governmental unit for preparation of the system development fee analysis.

(3) If no capital improvements are planned for construction within five years or the foregoing costs are otherwise paid or provided for, then principal and interest on bonds, notes, or other obligations issued by or on behalf of a local governmental unit to finance the construction or acquisition of existing capital improvements.

(b) Revenue from system development fees calculated using the buy-in method may be expended for previously completed capital improvements for which capacity exists and for capital rehabilitation projects. The basis for the buy-in calculation for previously completed capital improvements shall be determined by using a generally accepted method of valuing the actual or replacement costs of the capital improvement for which the buy-in fee is being collected less depreciation, debt credits, grants, and other generally accepted valuation adjustments.

(c) A local governmental unit may pledge a system development fee as security for the payment of debt service on a bond, note, or other obligation subject to compliance with the foregoing limitations.

(d) System development fee revenues shall be accounted for by means of a capital reserve fund established pursuant to Part 2 of Article 3 of Chapter 159 of the General Statutes and limited as to expenditure of funds in accordance with this section.

"§ 162A-212. Reserved.

"§ 162A-213. Time for collection of system development fees.

For new development involving the subdivision of land, the system development fee shall be collected by a local governmental unit either at the time of plat recordation or when water or sewer service for the subdivision or other development is committed by the local governmental unit. For all other new development, the local governmental unit shall collect the system development fee at the time of application for connection of the individual unit of development to the service or facilities.

"§ 162A-214. Reserved.

"§ 162A-215. Narrow construction.

Notwithstanding G.S. 153A-4 and G.S. 160A-4, in any judicial action interpreting this Article, all powers conferred by this Article shall be narrowly construed to ensure that system development fees do not unduly burden new development."

SECTION 2. G.S. 130A-64 reads as rewritten:

"§ 130A-64. Service charges and rates.

(a) A sanitary district board shall apply service charges and rates based upon the exact benefits derived. These service charges and rates shall be sufficient to provide funds for the maintenance, adequate depreciation and operation of the work of the district. If reasonable, the service charges and rates may include an amount sufficient to pay the principal and interest maturing on the outstanding bonds and, to the extent not otherwise provided for, bond anticipation notes of the district. Any surplus from operating revenues shall be set aside as a separate fund to be applied to the payment of interest on or to the retirement of bonds or bond anticipation notes. The sanitary district board may modify and adjust these service charges and rates.

(b) The district board may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes."

SECTION 3. G.S. 153A-277 reads as rewritten:

"§ 153A-277. Authority to fix and enforce rates.

(a) A county may establish and revise from time to time schedules of rents, rates, fees, charges, and penalties for the use of or the services furnished or to be furnished by a public enterprise. Schedules of rents, rates, fees, charges, and penalties may vary for the same class of service in different areas of the county and may vary according to classes of service, and different schedules may be adopted for services provided outside of the county. A county may include a fee relating to subsurface discharge wastewater management systems and services on the property tax bill for the real property where the system for which the fee is imposed is located.

...

(a2) A county may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes.

...."

SECTION 4.(a) G.S. 160A-314 reads as rewritten:

"§ 160A-314. Authority to fix and enforce rates.

(a) A city may establish and revise from time to time schedules of rents, rates, fees, charges, and penalties for the use of or the services furnished or to be furnished by any public enterprise. Schedules of rents, rates, fees, charges, and penalties may vary according to classes of service, and different schedules may be adopted for services provided outside the corporate limits of the city.

...

(e) A city may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes."

SECTION 4.(b) G.S. 160A-317 is amended by adding a new subsection to read:

"(a4) System Development Fees. – A city may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes."

SECTION 5.(a) G.S. 162A-6(a) is amended by adding a new subdivision to read:

"(9a) To impose and require system development fees only in accordance with Article 8 of this Chapter."

SECTION 5.(b) G.S. 162A-9 is amended by adding a new subsection to read:

"(a5) An authority may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 6.(a) G.S. 162A-36(a) is amended by adding a new subdivision to read:

"(8a) To impose and require system development fees only in accordance with Article 8 of this Chapter."

SECTION 6.(b) G.S. 162A-49 reads as rewritten:

"§ 162A-49. Rates and charges for services.

(a) The district board may fix, and may revise from time to time, rents, rates, fees and other charges for the use of land for the services furnished or to be furnished by any water system or sewerage system or both. Such rents, rates, fees and charges shall not be subject to supervision or regulation by any bureau, board, commission, or other agency of the State or of any political subdivision. Any such rents, rates, fees and charges pledged to the payment of revenue bonds of the district shall be fixed and revised so that the revenues of the water system or sewerage system or both, together with any other available funds, shall be sufficient at all times to pay the cost of maintaining, repairing and operating the water system or the sewerage system or both, the revenues of which are pledged to the payment of such revenue bonds, including reserves for such purposes, and to pay the interest on and the principal of such revenue bonds as the same shall become due and payable and to provide reserves therefor. If any such rents, rates, fees and charges are pledged to the payment of any general obligation bonds issued under this Article, such rents, rates, fees and charges shall be fixed and revised so as to comply with the requirements of such pledge. The district board may provide methods for collection of such rents, rates, fees and charges and measures for enforcement of collection thereof, including penalties and the denial or discontinuance of service.

(b) The district board may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 7.(a) G.S. 162A-69 is amended by adding a new subdivision to read:

"(8a) To impose and require system development fees only in accordance with Article 8 of this Chapter."

SECTION 7.(b) G.S. 162A-72 reads as rewritten:

"§ 162A-72. Rates and charges for services.

(a) The district board may fix, and may revise from time to time, rents, rates, fees and other charges for the use of and for the services furnished or to be furnished by any sewerage system. Such rents, rates, fees and charges shall not be subject to supervision or regulation by any bureau, board, commission, or other agency of the State or of any political subdivision. Any such rents, rates, fees and charges pledged to the payment of revenue bonds of the district shall be fixed and revised so that the revenues of the sewerage system, together with any other available funds, shall be sufficient at all times to pay the cost of maintaining, repairing and operating the sewerage system the revenues of which are pledged to the payment of such revenue bonds, including reserves for such purposes, and to pay the interest on and the principal of such revenue bonds as the same shall become due and payable and to provide reserves therefor. If any such rents, rates, fees and charges are pledged to the payment of any general obligation bonds issued under this Article, such rents, rates, fees and charges shall be fixed and revised so as to comply with the requirements of such pledge. The district board may provide methods for collection of such rents, rates, fees and charges and measures for enforcement of collection thereof, including penalties and the denial or discontinuance of service.

(b) The district board may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 8. G.S. 162A-85.13 is amended by adding a new subsection to read:

"(a1) The district board may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 9. G.S. 162A-88 reads as rewritten:

"§ 162A-88. District is a municipal corporation.

(a) The inhabitants of a county water and sewer district created pursuant to this Article are a body corporate and politic by the name specified by the board of commissioners. Under that name they are vested with all the property and rights of property belonging to the corporation; have perpetual succession; may sue and be sued; may contract and be contracted with; may acquire and hold any property, real and personal, devised, sold, or in any manner conveyed, dedicated to, or otherwise acquired by them, and from time to time may hold, invest, sell, or dispose of the same; may have a common seal and alter and renew it at will; may establish, revise and collect rates, fees or other charges and penalties for the use of or the services furnished or to be furnished by any sanitary sewer system, water system or sanitary sewer and water system of the district; and may exercise those powers conferred on them by this Article.

(b) The district board may require system development fees only in accordance with Article 8 of this Chapter."

SECTION 10.(a) G.S. 1-52(15) reads as rewritten:

"(15) For the recovery of taxes paid as provided in ~~G.S. 105-381~~G.S. 105-381 or for the recovery of an unlawful fee, charge, or exaction collected by a county, municipality, or other unit of local government for water or sewer service or water and sewer service."

SECTION 10.(b) This section is to clarify and not alter G.S. 1-52.

SECTION 11. Sections 1 through 9 of this act become effective October 1, 2017, and apply to system development fees imposed on or after that date. Section 10 of this act, being a clarifying amendment, has retroactive effect and applies to claims accrued or pending prior to and after the date that section becomes law. Nothing in this act provides retroactive authority for any system development fee, or any similar fee for water or sewer services to be furnished, collected by a local governmental unit prior to October 1, 2017. The remainder of this act is effective when it becomes law and applies to claims accrued or pending prior to and after that date.

In the General Assembly read three times and ratified this the 29th day of June, 2017.

s/ Daniel J. Forest
President of the Senate

s/ Tim Moore
Speaker of the House of Representatives

Roy Cooper
Governor

Approved _____m. this _____ day of _____, 2017