Town of Smithfield

Johnston County, North Carolina

System Development Fee Analysis

PROVIDED BY:

ENVIROLINK

November 6, 2023

Original report August 31, 2023
Revision 1, November 5, 2023
Revision 2, November 6, 2023

Revision #1 dated November 5, 2023, incorporates revisions to the assets included in the water system and wastewater system analysis and related or editorial corrections.

A. The following assets were moved to the water system assets and removed from the wastewater asset list:

	Asset #	Description
1.	00038	ALUM SLUDGE HANDLING FA
2.	00213	HYDROGRITTER
3.	00214	SLUDGE PRESS
4.	00215	SLUDGE PRESSSLUDGE PRESS PUMP
5.	00608	SLUDGE PRESS/DEWATERING SYSTEM
6.	00650	200 AMP PANNEL&112.5 KVA TRANSFORMER
7.	00665	2-WAY ELECTRIC CONTROL VALVES
8.	00710	SAND GRIT PUMP
9.	00327	LOH & ROF WATER FILTER CO
10.	00328	CHLORINE DIOXIDE SYSTEM
11.	00527	SLUDGE SYSTEM
12.	00194	DOUBLE WAYY TANK 25
13.	00195	INSTAVLAVE COMPLETE
14.	00664	BOOKR DAIRY RD ENGR & CONST

B. The following assets were moved to the wastewater system assets and removed from the water asset list:

	Asset #	Description
1.	00211	DRI-PRIME DIESEL PUMP
2.	00552	CUR OFF VALUE IN SERV

C. The water plant commissioned in 2022 is added to the water asset list.

D. Other editorial and related corrections to the document

Revision #2 dated November 6, 2023 is a correction for updated information on REUs and meter size chart, page 14

Town of Smithfield

System Development Fee Analysis

I hereby certify this Town of Smithfield, System Development Fee Analysis and Revision #1 were prepared under my direct supervision. I also certify I am a duly Registered Professional Engineer under the laws of North Carolina

Registration # 9553

Kenneth M. Raber, P.E.

OVERVIEW

The Town of Smithfield (Town) retained Envirolink of North Carolina, LLC. to prepare an update to System Development Fee (SDF) analysis for Town's Water and Wastewater utility systems in order meet the requirements of General Statute 162A; Article 8, which provides that an SDF analysis is required to be updated every five years if an SDF fee if is to remain in effect as part of the Town's Rate and Fee schedule.

This SDF is developed in accordance with and to meet the requirements of General Statute 162A; Article 8; System Development Fees. System development fees are one-time charges that may be used to fund capital improvements necessary for the expansion of a utility system or to properly allocate the capital investment made by existing customers on utility system that is available to serve new development or a combination thereof. The Town cannot implement or continue any form of "system development" charges or fees unless they are developed, reviewed, approved and administered in accordance with Article 8. The scope of this analysis is limited to the development of a calculated maximum appropriate SDF, should the Town wish to implement an SDF under Article 8.

The SDF developed within this analysis, for both water and wastewater, is based on Equivalent Residential Units (ERU) and an appropriate valuation of existing and planned (approved) facilities to be used by new development. The SDF, upon proper review and approval, can be implemented as a charge to be applied under the authority granted to the Town in accordance with General Statute 162A; Article 8; System Development Fees. (Subject to the appropriate Posting, Notice, Public Hearing and accounting requirements of Article 8.)

Other types (sizes) of connections are herein evaluated with respect to the capacity proportional to ERU and the SDF for other size connections. This analysis provides a SDF schedule for other size connections in accordance with established standards.

The SDF developed within this analysis for the Town, is based on information provided by the Town, is reasonably related to the capital facility demands of new development and / or the value of the existing system and/or proposed expansions of the system to be made available for new development. This report documents the data, methodology, assumptions and results of the requested SDF analysis.

The maximum SDF per Equivalent Residential Unit (ERU) calculated for the Town as provided by this analysis is $595 for the Water System and $763 for the Wastewater System. The details and components are provided in the following analysis.

SYSTEM INFRASTRUCTURE

The Town's Water System contains over 122 miles of distribution system lines and over 5,703 retail customers. The Town had an average daily use of 2.12 MGD and a capacity of 8.30 MGD. In addition to the Town's water use, the Town provides approximately 2.0 MGD in Water sales to Johnston County Utilities via a 16-inch connection. The Town maintains approximately 2 million gallons of potable water storage facilities throughout the system. The Town's distribution system is designed to convey all permitted water.

The Town's Wastewater system consists of over 93 miles of gravity pipes and 6 miles of force mains. The Wastewater system conveys an average of 2.14 MGD and a peak of 3.0 MGD to the Johnston County Utilities Wastewater Treatment Plant.

The Town has several ongoing capital projects for which funds have been expended and principal payments have been made that are not in the Inventory of Assets. The principal payments on these projects, if they qualify, have been included as the basis for the Incremental SDF calculation and include the following:

(1) I&I Sand Removal - Wastewater Project - $1.43 M - Principal to Date $1,032,267

(2) Various Water & Wastewater Projects - $1.182 M - Principal to Date $863,051

REGULATORY REQUIREMENTS

In accordance with SESSION LAW 2017-138 HOUSE BILL 436 - 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; General Statute 162A; Article 8; System Development Fees was enacted wherein a "system development fee" is described as:

162A-201. Definitions.

(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).

In addition, General Statute 162A; Article 8; System Development Fees provides that the SDF analysis meet the following conditions:

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.

The "service unit of new development" is based on the following definition:

162A-201. Definitions.

(8) Service unit. – A unit of measure, typically an equivalent residential unit, calculated in accordance with generally accepted engineering or planning standards.

In addition, there are certain minimum requirements required by the statute.

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.

AUTHORIZATION AND IMPLEMENTATION

The SDF proposed by the Town is authorized by General Statute 162A; Article 8; System Development Fees:

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.

Town is required by General Statute 162A; Article 8; System Development Fees to implement and maintain the proposed SDF through the following process:

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.

COLLECTION AND USE OF REVENUE FROM SDF

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.

The Town is allowed to collect the SDF in when the following conditions are met:

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.

SYSTEM DEVELOPMENT FEE CALCULATION METHODOLOGY

The following methodology was used to calculate the System Development Fee Buy-In component for this analysis:

SYSTEM CAPACITY (GPD)

(GPD)/ EQUIVALENT RESIDENTIAL UNIT = TOTAL EQUIVALENT RESIDENTITAL UNITS (SYSTEM)
(Based on Capacity of Each System)

SYSTEM VALUE (REPLACEMENT COST NEW LESS DEPRECIATION- ADJUSTED FOR DEBT, ETC.)

TOTAL EQUIVALENT RESIDENTIAL UNITS (SYSTEM CAPACITY) =

= SYSTEM DEVELOPMENT FEE (BUY-IN) / EQUIVALENT RESIDENTIAL UNIT

The following methodology was used to calculate the System Development Fee Incremental component for this analysis:

[TOTAL PROJECT COST (TO DATE) - INTEREST (TO DATE)] = TOTAL PRINCIPAL (TO DATE)

TOTAL EQUIVALENT RESIDENTIAL UNITS (SYSTEM CAPACITY) =

= SYSTEM DEVELOPMENT FEE (INCREMENTAL) / EQUIVALENT RESIDENTIAL UNIT

DEVELOPMENT FEE CALCULATION METHODOLOGY - BUY-IN ASSET VALUATION

In accordance with General Statute 162A; Article 8; System Development Fees; (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:

> (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."

The 7th edition of AWWA's "Principles of Water Rates, Fees, and Charges" documents methods used to calculate system value using descriptions similar to those in GS162A; Article 8. AWWA defines the most common options to determine the value for system development charges include the "buy-in method", "incremental cost method" and "combined approach". These terms are:

" l. The buy-in method is based on the value of the existing system's capacity. This method is typically used when the existing system has sufficient capacity to serve new development now and into the future.
2. The incremental cost method is based on the value or cost to expand the existing system's capacity. This method is typically used when the existing system has limited or

no capacity to serve new development and new or incremental facilities are needed to serve new development now and into the future.

3. The combined approach is based on a blended value of both the existing and expanded system's capacity. This method is typically used where some capacity is available in parts of the existing system (e.g., source of supply), but new or incremental capacity will need to be built in other parts (e.g., treatment plant) to serve new development at some point in the future."

AWWA's "Principles of Water Rates, Fees and Charges" documents several options to calculate the value of the existing system's capacity.

"Validation and system equity. There are different methods used to establish a value to the existing assets under the buy-in methodology. If the existing assets are valued at their original cost or depreciated original cost, this is often referred to as the original cost method. An alternative valuation approach is to value the existing assets at a replacement cost or a depreciated replacement cost. This is commonly referred to as the replacement cost method. According to the replacement cost method, the existing system components are valued at the current-day cost of replicating the existing assets. This is typically accomplished through the use of a construction cost index or other comparable valuation method to bring the historical costs up to current-day value. In summary form the four valuation approaches for system assets under the buy-in method are as follows:

1. Original cost (OC) is the cost of construction in the year of construction.
2. Original cost less accumulated depreciation (OCLD) is also known as the net book value of the system assets.
3. Replacement cost new (RCN) is the original cost escalated to current-day dollars, providing an estimate of the current-day cost of replicating the existing facilities.
4. Replacement cost new less depreciation (RCNLD) is the original cost escalated to current-day dollars, less accumulated replacement cost depreciation. This provides an estimate of the current-day cost of duplicating the existing facilities that is then adjusted by an estimate of the replacement cost depreciation, resulting in a replacement cost valuation that reflects the remaining depreciable life of the facility."

"A combination of the approaches may also be used. Using the OC and OCLD valuations, the SDC reflects the original investment in the existing capacity. The new customer "buys in" to the capacity at the OC or the net book value cost (OCLD) for the facilities and as a result pays an amount similar to what the existing customers paid for the capacity (OC) or the remaining value of the original investment (OCLD)."

"Using the RCN and the RCNLD valuations, the SDC [System Development Charge] reasonably reflects the cost of providing new expansion capacity to customers as if the capacity was added at the time the new customers connected to the water system. <u>It may also be thought of as a valuation method to fairly compensate the existing customers for the carrying costs of the excess capacity built into the system in advance of when the new customers connect to the system. This is because, up to the point of the new customer connecting to the system, the existing customers have been financially responsible for the carrying costs of that excess capacity that is available for development.</u>

System liabilities and equity. Balance-sheet liabilities and equity that are recognized in the valuation method should equitably address the issue of the outstanding principal portion of long-term debt. When debt is issued to finance a growth- or expansion-related project, the principal portion of the debt service will be repaid over time, possibly through a customer's rates after connection to the system and payment of an SDC. Given that, a debt credit may be applicable to avoid the potential double-charging of these debt costs through both the SDC and user rates. In a situation where the SDC is separated into functional components (source of supply, treatment, pumping, transmission, etc.), the analysis may provide these debt credits at the functional level or on a combined system level at the end of the analysis."

"Valuation adjustments may be necessary if grants or other contributions were used to develop the capacity-related facilities or if a facility is replaced and the resulting replacement provides additional capacity to accommodate future customers. This may be addressed within the valuation process by determining the percentage of the asset eligible for the SDC (i.e., percent SDC eligible). For example, if grants were provided specifically for the water treatment facilities, these grant contributions should be credited to the value (cost) of those specific facilities, and the grant-related portion of the water treatment plant's value should not be included in the SDC."

In addition, GS 162A-211 "Use and administration of revenue" paragraph (b) states "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." Therefore, the AWWA methodologies of OCLD or RCNLD meets the requirements of this section.

The "buy-in" methodology is used to value the existing infrastructure and the valuation of the complete infrastructure is based on Replacement Cost New Less Depreciation (RCNLD) to properly address the "carrying costs" of the existing system infrastructure borne by the existing customers.

Each system's value is then divided by the Town's total ERU for water or wastewater based on each system's capacity to determine the Buy -In SDF / ERU.

SYSTEM DEVELOPMENT FEE CALCULATION METHODOLOGY - INCREMENTAL ASSET VALUATION

The "incremental cost" methodology is used when additional facilities are needed to provide capacity due to additional growth or maintain service to ensure system reliability. During the development and construction of the additional facilities, these projects under construction would not be included as current capital assets of the Town. However, funds have been expended by the Town and revenues have been collected from the Town's existing customers for these facilities. These revenues have recouped costs to date for payments for actual equipment or facilities or the payment to date of principal and interest as part of the project financing. As a result, the existing customers, through the rates, have made a principal investment in the new projects which may not be included in the existing assets.

Therefore, it is appropriate to incorporate the valuation funds expended for these projects into the development of the SDF costs in order to adequately address principal investment made by the existing customers. The SDF analysis methodology used sums the principal paid to date for existing capital

expenditures that are not included in the Asset Inventory and excludes interest paid to date and other contributions for approved and implemented projects. This adequately addresses the requirements of Article 8 for the exclusion of interest and other contributions.

The "incremental cost" methodology described above is used to value facilities that are approved, for which funds have been expended and that are not included in the assets used by the "buy-in" methodology described in the preceding section.

Each system's value of principal payments for ongoing projects is then divided by the Town's total ERU for water or wastewater based on each system's capacity to determine the Incremental SDF / ERU. For the comparison of the credit related to the Incremental SDF, the total payments to date by the existing customers is divided by the Town's existing ERU for water or wastewater based on the Town's maximum usage to date. This provides a more accurate comparison to the costs incurred by the existing customer base for the ongoing projects compared to the calculated Incremental SDF / ERU for new customers.

EQUIVALENT RESIDENTIAL UNIT TOTAL

In accordance with GS 162A-205 (6); the analysis is required to calculate "... 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." GS 162A-201(8) defines Service unit as "A unit of measure, typically an equivalent residential unit, calculated in accordance with generally accepted engineering or planning standards."

For this analysis, the SDF per ERU is based on the Total Equivalent Residential Units by Capacity for the Town. The Equivalent Residential Unit (ERU) is based on a demand of 360 gallons per day (GPD) for Wastewater use. (*NC Administrative Code 15A NCAC02T.0114 for a three-bedroom home based on 120 GPD per bedroom). The Total ERUs for water or wastewater are determined by dividing the system capacity GPD by the single ERU demand of 360 GPD for wastewater or 400 GPD for water (assumes 90 percent pass through to wastewater). This determines the Total ERU capable of being served by each system.

Water	System Capacity MGD	8.300	MGD
	System Capacity GPD	8,300,000	GPD
	Equivalent Residential Unit GPD *	400	GPD / ERU
	Total Equivalent Residential Units by Capacity	20,750	ERU (Capacity Based)

* NC Administrative Code 15A NCAC02T.0114 for a three bedroom home based on 120 GPD per bedroom

Waste Water	System Capacity MGD	3.000	MGD
	System Capacity GPD	3,000,000	GPD
	Equivalent Residential Unit GPD	360	GPD / ERU
	Total Equivalent Residential Unit by Capacity	8,333	ERU (Capacity Based)

* NC Administrative Code 15A NCAC02T.0114 for a three bedroom home based on 120 GPD per bedroom X 90%

CALCULATION FOR VARIOUS CATEGORIES OF DEMAND

The analysis is also required to provide an equivalency or conversion table for use in determining the fees applicable for various categories of demand. The SDF for larger meters is determined by the SDF per ERU times the Capacity Factor for larger meters. The Capacity Factor methodology is consistent with industry standards and represents a reflection of the possible demand, and therefore the capital cost of providing service for different meter sizes. The AWWA based Capacity Factor chart below is used to calculate SDF for "various categories of demand" which is based on the installed tap / meter size.

Meter Size	AWWA (capacity)	Capacity Factor
5/8 inch	20	1.00
3/4 inch	30	1.50
1 inch	50	2.50
1-1/2 inch	100	5.00
2 inch	160	8.00
3 inch	300	15.00
4 inch	500	25.00
6 inch	1,000	50.00
8 inch	1,600	80.00
10 inch	2,300	115.00
12 inch	4,300	215.00

SYSTEM DEVELOPMENT FEE and CALCULATED SYSTEM DEVELOPMENT FEE

The calculated SDF shown below for the Town was developed using the System Development Fee Methodology described previously for the Buy-In and Incremental portions and utilizes the utility asset and capacity information provided by the Town. An SDF can be implemented after completing the required posting, notice and public hearing requirements, which includes addressing any comments received during the posting period. The Town can choose to implement a SDF that is less than or equal to the calculated SDF (Buy-In, Incremental or Total) as determined by this analysis.

SYSTEM DEVELOPMENT FEE

Water System	Capital Assets	= Equivalent residential Unit (ERU) SDF	(Buy in)	$595
Water System	CIP	= Incremental Cost/ERU/CIP Plan SDF		
Water System		**System Development fee per ERU**		**$595**
Wastewater System	Capital Assets	= Equivalent Residential Unit SDF	(Buy in)	$763
Wastewater System	CIP	= Incremental Cost/ERU/CIP Plan SDF		
Wastewater System		**System Development Fee per ERU**		**$763**
Total System Development Fee per ERU				**$1,358**

Meter Size	AWWA (GPM capacity)	Capacity Factor	Water SDF	Waste Water SDF	Total SDF
5/8 inch	20	1.00	$ 595.00	$ 763.00	$ 1,358.00
3/4 inch	30	1.50	$ 893.00	$ 1,145.00	$ 2,038.00
1 inch	50	2.50	$ 1,480.00	$ 1,908.00	$ 3,388.00
1-1/2 inch	100	5.00	$ 2,975.00	$ 3,815.00	$ 6,790.00
2 inch	160	8.00	$ 4,760.00	$ 6,104.00	$ 10,864.00
3 inch	300	15.00	$ 8,925.00	$ 11,445.00	$ 20,370.00
4 inch	500	25.00	$ 14,875.00	$ 19,075.00	$ 33,950.00
6 inch	1,000	50.00	$ 29,750.00	$ 38,150.00	$ 67,900.00

Residential Customers are to be under 5/8 inch meter size unless additional capacity is required for adequate service.Commercial, Industrial, Institutional, and Irrigation meters maximum should be based actual meter / tap size.

CALCULATED SYSTEM DEVELOPMENT FEE

System Development Fee Based on RCNLD and Capacity (Actual Calculation)

Water System	Capital Assets	= Equivalent residential Unit (ERU) SDF	(Buy in)	$594.62
Water System	CIP	0	(Incremental)	
Water System		**System Development fee per ERU**		**$594.62**

Wastewater System	Capital Assets	= Equivalent Residential Unit SDF	(Buy in)	$763.27
Wastewater System	CIP	0	(Incremental)	

Wastewater System	**System Development Fee per ERU**	**$763.27**

Total System development Fee per ERU **$1,357.89**

SYSTEM ASSETS VALUE REPLACEMENT COST NEW LESS DEPRECIATON (BUY IN)

The following charts show the calculation of each system's (Water or Wastewater) Replacement Cost New Less Depreciation, adjusted for outstanding debt, and adjusted for any assets currently in service but not included in the most recent Audited assets to determine the system asset value. The asset value for each system is then divided by the total Equivalent Residential Units (ERU) of capacity for that system to determine the SDF per ERU.

WATER	Asset Line #	Water System Asset Description 2022 Asset List	[1] Original Cost	[2] Dep Yrs	[3] Accrued Depreciation	[4] Yr Install	[5] % Dep	[6] Ins Yr Index	[7] 2022 Index	[8] RCN Factor	[9] RCN	[10] RCNLD
		WATER PLANT - NOT INCLUDED	$ 17,598,500		$ 417,306	2022		236.8	236.8	1	$ 17,598,500	$ 17,181,194
	38	ALUN SLUDGE HANDLING FA (M0VED FROM WW)	$ 8,373	50	$ 2,987	2005	35.67%	112.1	236.8	2.112	$ 17,688	$ 11,379
	213	HYDROGRITTER(M0VED FROM WW)	$ 32,606	10	$ 32,606	2018	60.00%	174.6	236.8	1.356	$ 73,704	$ 29,481
	214	SLUDGE PRESS -(M0VED FROM WW)	$ 83,000	10	$ 46,342	2016	55.83%	174.6	236.8	1356	$ 112,568	$ 49,717
	215	SLUDGE PRESS PUMP - (M0VED FROM WW)	$ 15,617	10	$ 9,110	2018	58.33%	183.3	236.8	1292	$ 20,175	$ 8,406
	608	Sludge press/dewatering system(M0VED FROM WW)	$ 269,929	10	$ 107,922	2019	40.00%	186.8	236.8	1.268	$ 342,179	$ 205,308
	660	200 amp panel & 112.5 kva transformer - (M0VED FROM WW)	$ 17,969	10	$ 55,411	2019	30.83%	186.8	236.8	1.268	$ 22,779	$ 15,756
	665	2-WAY ELECTRONIC CONTROL VALVES-2 - (M0VED FROM WW)	$ 35,640	10	$ 14,256	2019	40.00%	186.8	236.8	1.268	$ 45,180	$ 27,108
	710	SAND DIRT PUMP = (M0VED FROM WW)	$ 30,851	20	$ 3,342	2015	10.83%	167.6	236.8	1.413	$ 43,589	$ 38,867
	327	LOH & ROF WATER FILTER CO - (M0VED FROM WW)	$ 49,965	20	$ 17,696	2016	35.42%	174.6	236.8	1.356	$ 67,765	$ 43,764
	328	CHLORINE DIOXIDE SYSTEM - (M0VED FROM WW)	$ 134,344	30	$ 40,303	1999	30.00%	89.39	236.8	2.649	$ 355,881	$ 249,116
	527	SLUDGE SYSTEM - (M0VED FROM WW)	$ 1,249,864	50	$ 966,954	1996	77.34%	81.79	236.8	2895	$ 3,618,620	$ 819,954
	194	DOUBLE WALL DAY TANK 25 - (M0VED FROM WW)	$ 17,605	10	$ 17,018	2014	96.67%	161.6	236.8	1465	$ 25,797	$ 860
	195	INSTAVALVE COMPLETE _ (M0VED FROM WW)	$ 38,355	10	$ 31,808	2014	82.50%	161.6	236.8	1465	$ 56,496	$ 9,887
	664	BOOKER DAIRY RD ENGR & CONST - (M0VED FROM WW)	$ 1,588,566	20	$ 284,618	2018	17.92%	183.8	236.8	1.292	$ 2,052,222	$ 1,684,533
	00036	CONSTRUCTION OF NEW OFFICE	$ 6,953.73	30	$ 6,200.47	1999	89.17%	89.39	236.8	2.649	$ 18,421	$ 1,995
	00047	IMPROVEMENTS TO WATER P	$ 205,762.00	30	$ 85,734.13	2020	41.67%	198	236.8	1.196	$ 246,083	$ 143,548
	00687	Riverbank Const & Refurb	$ 313,895.59	20	$ 35,313.30	2020	11.25%	198	236.8	1.196	$ 375,406	$ 333,173
	00711	Filter Rehab No. i	$ 82,250.00	10	$ 7,196.91	2022	8.75%	236.8	236.8	1.000	$ 82,250	$ 75,053
	00755	CLX Online Residual Cloring A	$ 29,580.57	30	$ 17,748.34	2005	60.00%	112.1	236.8	2.112	$ 62,486	$ 24,994
	00177	DECHLORINATION SYSTEM	$ 22,609.00	30	$ 14,893.99	2011	65.88%	142.8	236.8	1.658	$ 37,492	$ 12,794
	00190	ECLIPSE SAMPLING STATION	$ 10,425.45	10	$ 6,081.54	2014	58.33%	161.6	236.8	1.465	$ 15,277	$ 6,365
	00196	NESHAP COMPLIANCE SERVIC	$ 11,250.00	10	$ 6,562.13	2014	58.33%	161.6	236.8	1.465	$ 16,485	$ 6,869
	00197	NESHAP COMPLIANCE SERVIC	$ 11,250.00	10	$ 6,562.13	2014	58.33%	161.6	236.8	1.465	$ 16,485	$ 6,869
	00198	TANK - 20,000 GAL FERRIC SUL	$ 27,850.00	10	$ 21,583.71	2015	77.50%	167.6	236.8	1.413	$ 39,349	$ 8,854
	00200	SOLARBEE GS-12 MIXER	$ 15,658.00	10	$ 11,091.02	2015	70.83%	167.6	236.8	1.413	$ 22,123	$ 6,453
	00204	TMH ANALYZER	$ 32,500.00	10	$ 22,749.94	2015	70.00%	167.6	236.8	1.413	$ 45,919	$ 13,776
	00206	LAB TOC ANALYZER	$ 23,500.00	10	$ 16,449.94	2016	70.00%	174.6	236.8	1.356	$ 31,872	$ 9,562
	00207	GENERATOR/VFDs	$ 97,700.00	10	$ 61,062.57	2017	62.50%	175.8	236.8	1.347	$ 131,600	$ 49,350
	00208	STORAGE TANK 10,500 GAL (1	$ 11,067.66	10	$ 5,810.49	2017	52.50%	175.8	236.8	1.347	$ 14,908	$ 7,081
	00209	STORAGE TANK 10,500 GAL (2	$ 11,067.66	10	$ 5,810.49	2016	52.50%	174.6	236.8	1.356	$ 15,010	$ 7,130
	00212	MCC CABINET	$ 25,000.00	10	$ 14,999.92	2016	60.00%	174.6	236.8	1.356	$ 33,906	$ 13,563
	00531	REPAIRS TO WATER PLANT FIL	$ 322,450.25	50	$ 94,688.61	1997	29.37%	85.74	236.8	2.762	$ 890,525	$ 629,019
	00550	AMONIA TREAT SYSTEM	$ 159,101.00	50	$ 61,534.85	1999	38.68%	89.39	236.8	2.649	$ 421,462	$ 258,455
	00551	AMMONIA STORAGE TANK	$ 8,890.00	20	$ 3,141.32	2018	35.34%	183.3	236.8	1.292	$ 11,485	$ 7,427
	00688	WATER LINE INSTALL 16" FRANK JONES RD	$ 198,629.90	40	$ 23,173.40	2021	11.67%	200.9	236.8	1.179	$ 234,124	$ 206,810
	00203	BACKHOE LOADER 420F	$ 81,500.00	10	$ 55,691.73	2015	68.33%	167.6	236.8	1.413	$ 115,150	$ 36,464
	00210	GENERATOR ENGINE PUMP ST	$ 13,063.67	10	$ 7,184.96	2017	55.00%	175.8	236.8	1.347	$ 17,597	$ 7,919
	00657	SOFTWARE - TYLER FINANCIAL	$ 40,750.69	20	$ 27,846.37	2019	68.33%	186.8	236.8	1.268	$ 51,658	$ 16,358
	00324	FIRE HYDRANT REPLACEMEN	$ 49,781.52	20	$ 22,401.52	2013	45.00%	157.5	236.8	1.503	$ 74,846	$ 41,166
	00553	16" WATER LINE IN SERV 15825	$ 142,425.00	50	$ 93,526.34	1969	65.67%	73.74	236.8	3.211	$ 457,376	$ 157,030
	00554	12" WATER LINE IN SER 11,475	$ 68,850.00	50	$ 45,211.50	1969	65.67%	73.74	236.8	3.211	$ 221,101	$ 75,911
	00555	8" WATER LINE IN SERVICE 22,	$ 113,500.00	50	$ 74,532.01	1967	65.67%	70.22	236.8	3.372	$ 382,774	$ 131,418
	00556	6" WATER LINE IN SERVICE 20	$ 352,459.95	50	$ 247,776.36	1969	70.30%	73.74	236.8	3.211	$ 1,131,870	$ 336,175
	00557	2 " WATER LINE IN SERVICE 29	$ 59,000.00	50	$ 38,644.66	1969	65.50%	73.74	236.8	3.211	$ 189,469	$ 65,368
	00558	1 1/2 " WATER LINE IN SERV 5,	$ 10,850.00	50	$ 7,106.41	1969	65.50%	73.74	236.8	3.211	$ 34,843	$ 12,022
	00559	10" WATER LINE IN SERV 1400	$ 5,260.00	50	$ 3,445.64	1991	65.51%	73.58	236.8	3.218	$ 16,928	$ 5,839
	00560	ASSORTED W& S	$ 65,157.68	50	$ 40,397.54	1993	62.00%	77.31	236.8	3.063	$ 199,589	$ 75,845
	00561	6" & 8" INSERT VALVES AND S	$ 6,946.67	50	$ 4,029.45	1994	58.01%	79.36	236.8	2.984	$ 20,729	$ 8,705
	00562	WEST SMITHFIELD WATER SY	$ 466,374.00	50	$ 408,926.28	1997	87.68%	85.74	236.8	2.762	$ 1,288,006	$ 158,656
	00563	RELOCATE WATER LINE ON M	$ 23,192.00	50	$ 11,634.17	1997	50.16%	85.74	236.8	2.762	$ 64,050	$ 31,920
	00564	WATER TAP @WAL-MART	$ 23,869.00	50	$ 11,775.14	1998	49.33%	87.49	236.8	2.707	$ 64,603	$ 32,733
	00565	WAL PAT RD WATER MAIN	$ 51,563.20	50	$ 25,266.10	2000	49.00%	91.9	236.8	2.577	$ 132,864	$ 67,760
	00566	RPLACE WATERLINE BETWEE	$ 14,652.50	50	$ 6,300.49	2000	43.00%	91.9	236.8	2.577	$ 37,755	$ 21,521
	00567	WATER LINE HOLLAND DR	$ 217,027.30	50	$ 95,853.54	2000	44.17%	91.9	236.8	2.577	$ 559,217	$ 312,230
	00571	METER BOX IN SERVICE 3,595	$ 223,148.75	50	$ 146,533.92	1969	65.67%	73.74	236.8	3.211	$ 716,607	$ 246,037
	00572	6" FIRD/HYD	$ 221,340.00	50	$ 145,346.60	1969	65.67%	73.74	236.8	3.211	$ 710,799	$ 244,041
	00609	BOOKER DAIRY RD EXT	$ 123,120.00	20	$ 24,624.00	2018	20.00%	183.3	236.8	1.292	$ 159,055	$ 127,244
	00647	OLD GOLDSBORO RD TIE INTO WATER SERVICE	$ 43,734.00	20	$ 8,200.12	2018	18.75%	183.3	236.8	1.292	$ 56,499	$ 45,905
	00648	SECOND STREET WATERLINE REPLACEMENT	$ 55,785.00	20	$ 9,994.92	2018	17.92%	183.3	236.8	1.292	$ 72,067	$ 59,155
	00660	WATER AIA	$ 163,902.50	20	$ 30,048.92	2018	18.33%	183.3	236.8	1.292	$ 211,741	$ 172,922

	Water System	Value Replacement Cost New Less Depreciation	24,694,812
		Less Debt in original report	306,528
		Less water plant debt added in revision	12,050,000
		Less Grants, Contributions, Etc.	
			12,356,528
	Water System	Value for System Development Fee /	12,338,284
Appendix D	Water System	Total Equivalent Residential Units by Capacity	20,750
	Water System	= Equivalent Residential Unit (ERU) SDF	$ 594.62

WASTEWATER	Asset Line #	Waste Water System Asset Description 2022 Asset List	[1] Original Cost	[2] Dep Yrs	[3] Accrued Depreciation	[4] Yr Install	[5] % Dep	[6] Ins Yr Index	[7] 2022 Index	[8] RCN Factor	[9] RCN	[10] RCNLD
	211	DRI- PRIME DIESEL PUMP - MOVED FROM WATER	$ 39,748	10	20205.11	2012	50.83%	175.8	236.8	1.347	$ 53,540	$ 26,324
	552	CUR OFF VALVE IN SERVICE - MOVED FROMWATER	$ 44,325	50	29107.34	1999	66.67%	73.74	236.8	3.211	$ 142,343	$ 48,869
	00651	PUMP W/20HP MOTOR	$ 26,871	10	$ 8,285	2018	30.83%	183.3	236.8	1.292	$ 34,714	$ 24,010
	00681	REMOTE SITE PLC & RADIO SYSTEM	$ 31,981	10	$ 4,397	2021	13.75%	200.9	236.8	1.179	$ 37,695	$ 32,512
	00528	UPGRADING OF INSTRUMENT	$ 27,920	50	$ 14,894	1997	53.35%	85.743	236.8	2.762	$ 77,108	$ 35,975
	00666	60x60 CONCRETE VAULTS W/12" BYPASS LINES	$ 38,500	20	$ 7,700	2019	20.00%	186.8	236.8	1.268	$ 48,805	$ 39,044
	00694	2022 FORD TRANSIT CONNECT	$ 23,620	5	$ 5,118	2021	21.67%	200.9	236.8	1.179	$ 27,841	$ 21,809
	00682	SEWER LINE REPLACEMENT - 104 CRESTVIEW ST	$ 41,436	20	$ 5,697	2020	13.75%	198	236.8	1.196	$ 49,556	$ 42,742
	00686	SEWER REPLACEMENT - DURHAM ST & FUTRELL ST	$ 106,940	20	$ 15,595	2020	14.58%	198	236.8	1.196	$ 127,896	$ 109,245
	00709	WATER SEWER LINE REPAIR - HWY 301 ACROSS FROM HOSPITAL	$ 21,940	40	$ 9,325	2021	42.50%	200.9	236.8	1.179	$ 25,861	$ 14,870
	00735	WATER/SEWER LINE REPLACEMENT	$ 28,155	40	$ 6,335	2022	22.50%	236.8	236.8	1.000	$ 28,155	$ 21,820
	00736	CLAYTON PUMP STATION REPLACE VALVE IN EXIST. VAULT	$ 40,500	40	$ 5,063	2022	12.50%	236.8	236.8	1.000	$ 40,500	$ 35,438
	00741	BY-PASS PUMPING & HOSES	$ 65,230	50	$ 6,523	1989	10.00%	73.739	236.8	3.211	$ 209,476	$ 188,528
	00149	MOTOR J. CO PUMP STATION	$ 5,000	10	$ 3,264	2012	65.29%	155.4	236.8	1.524	$ 7,619	$ 2,645
	00199	MINI EXCAVATOR - CATERPIL	$ 60,879	10	$ 47,181	2014	77.50%	161.6	236.8	1.465	$ 89,209	$ 20,072
	00201	SCADA - 9 STATIONS/FLOWER	$ 51,753	10	$ 40,109	2015	77.50%	167.6	236.8	1.413	$ 73,121	$ 16,452
	00202	GRINDER - LIFT STATION #3	$ 29,688	10	$ 21,029	2015	70.83%	167.6	236.8	1.413	$ 41,946	$ 12,234
	00205	AIR COMPRESSOR DOOSAN PO	$ 21,924	10	$ 14,799	2017	67.50%	175.8	236.8	1.347	$ 29,531	$ 9,598
	00216	PUMP 50 HP FAIRNIJ PUMP STA	$ 14,900	10	$ 7,823	2017	52.50%	175.8	236.8	1.347	$ 20,070	$ 9,533
	00217	PUMP 50 HP FAIRNIJ PUMP STA	$ 14,900	10	$ 7,823	2017	52.50%	175.8	236.8	1.347	$ 20,070	$ 9,533
	00218	CONTROL PANEL PUMP STATI	$ 45,840	10	$ 24,066	2018	52.50%	183.3	236.8	1.292	$ 59,219	$ 28,129
	00646	2019 RAMPANT TRAILER	$ 8,090	10	$ 3,169	2018	39.17%	183.3	236.8	1.292	$ 10,451	$ 6,358
	00652	PUMP	$ 29,920	5	$ 10,971	2019	36.67%	186.8	236.8	1.268	$ 37,929	$ 24,022
	00683	US JETTING TRAILER JETTER	$ 49,500	30	$ 6,188	2004	12.50%	100.3	236.8	2.361	$ 116,865	$ 102,257
	00313	12 INCH LINE BUFFALO RD	$ 165,005	30	$ 97,062	2004	58.82%	100.3	236.8	2.361	$ 389,563	$ 160,407
	00314	FLANDERS FILTER PROJECT	$ 154,902	30	$ 92,941	2006	60.00%	124.2	236.8	1.907	$ 295,337	$ 118,135
	00318	IMPROVEMENTS TO LIFT STAT	$ 932,026	30	$ 497,080	2011	53.33%	142.8	236.8	1.658	$ 1,545,545	$ 721,254
	00319	BOOKER DAIRY SEWER LINE	$ 110,000	20	$ 40,333	2011	36.67%	142.8	236.8	1.658	$ 182,409	$ 115,525
	00320	BUFFALO ROAD METER POINT	$ 135,988	30	$ 74,793	2011	55.00%	142.8	236.8	1.658	$ 225,503	$ 101,476
	00321	WALMART/BAYHILL LINE LOO	$ 51,261	30	$ 18,796	2011	36.67%	142.8	236.8	1.658	$ 85,004	$ 53,836
	00322	HOSPITAL ROAD W/S LINE	$ 350,811	20	$ 128,631	2013	36.67%	157.5	236.8	1.503	$ 527,442	$ 334,046
	00323	WEST SMITHFIELD I&I	$ 49,848	20	$ 22,432	2013	45.00%	157.5	236.8	1.503	$ 74,946	$ 41,220
	00325	SEWER LINE REHAB I-95	$ 176,518	20	$ 79,433	2014	45.00%	161.6	236.8	1.465	$ 258,659	$ 142,263
	00326	HWY 70 BRIDGE REPLACEMEN	$ 372,810	50	$ 149,124	1989	40.00%	73.739	236.8	3.211	$ 1,197,220	$ 718,332
	00560	ASSORTED W& S	$ 65,158	50	$ 40,398	1993	62.00%	77.305	236.8	3.063	$ 199,589	$ 75,845
	00569	WEST SMITHFIELD WASTEWA	$ 7,957	50	$ 3,448	1989	43.33%	73.739	236.8	3.211	$ 25,553	$ 14,481
	00573	MAMHOLE IN SERV 1032	$ 33,930	50	$ 22,281	1990	65.67%	75.5	236.8	3.136	$ 106,419	$ 36,537
	00574	6" SEWER LINE 15,775 FT	$ 31,550	50	$ 20,349	1990	64.50%	75.5	236.8	3.136	$ 98,954	$ 35,130
	00575	8" SEWER LINE 170,797 FT	$ 170,797	50	$ 110,164	1990	64.50%	75.5	236.8	3.136	$ 535,692	$ 190,172
	00576	10" SEWER LINE 13,875 FT	$ 41,625	50	$ 26,849	1990	64.50%	75.5	236.8	3.136	$ 130,554	$ 46,345
	00577	12" SEWER LINE 22,300 FT	$ 66,900	50	$ 43,151	1994	64.50%	79.358	236.8	2.984	$ 199,626	$ 70,867
	00578	WEST SMITHFIELD SEWER SYS	$ 1,969,668	50	$ 1,361,082	1996	69.10%	83.767	236.8	2.827	$ 5,568,059	$ 1,720,414
	00579	INSTALL MANHOLE 120 SEWE	$ 8,500	50	$ 4,350	1997	51.17%	85.743	236.8	2.762	$ 23,475	$ 11,462
	00580	REPAIR TO 12" SEWER 2ND ST	$ 7,298	50	$ 3,709	1997	50.83%	85.743	236.8	2.762	$ 20,154	$ 9,910
	00581	12" SEWERLINE REPLACEMEN	$ 31,890	50	$ 15,945	1998	50.00%	87.491	236.8	2.707	$ 86,312	$ 43,156
	00582	SEWERLINE CONSTRUCTION	$ 44,406	50	$ 21,167	2001	47.67%	93.3	236.8	2.538	$ 112,705	$ 58,982
	00583	REPLACE SEWER LINE	$ 42,227	50	$ 17,704	1989	41.93%	73.739	236.8	3.211	$ 135,605	$ 78,751
	00584	PUMP	$ 18,000	20	$ 11,820	2014	65.67%	161.6	236.8	1.465	$ 26,376	$ 9,056
	00595	PUMP STATION #1 TOP REPLA	$ 52,760	20	$ 21,543	2015	40.83%	167.6	236.8	1.413	$ 74,544	$ 44,105
	00596	WILSON ST LINE REPLACEMEN	$ 30,520	20	$ 10,937	2015	35.83%	167.6	236.8	1.413	$ 43,121	$ 27,669
	00597	SEWER LINE REPLACEMENT R	$ 25,589	20	$ 8,956	2017	35.00%	175.8	236.8	1.347	$ 34,468	$ 22,404
	00598	PUMPSTATION #7 RENO	$ 116,821	20	$ 30,665	2018	26.25%	183.3	236.8	1.292	$ 150,918	$ 111,302
	00602	NC 210 SEWER LINE & PS3 UPGD	$ 309,155	20	$ 61,831	2018	20.00%	183.3	236.8	1.292	$ 399,389	$ 319,511
	00661	LIFT STATION #12 UPGRADE & 4" MAIN REPLACE	$ 209,902	20	$ 41,980	2018	20.00%	183.3	236.8	1.292	$ 271,167	$ 216,934
	00662	SEWER AIA	$ 155,101	20	$ 27,789	2018	17.92%	183.3	236.8	1.292	$ 200,370	$ 164,471
	00663	SANITARY SEWER REPLACEMENT DURHAM ST	$ 179,778	20	$ 35,956	2017	20.00%	175.8	236.8	1.347	$ 242,159	$ 193,727
	00649	2019 FORD F250 2WD REG CAB	$ 29,051	5	$ 20,820	2018	71.67%	183.3	236.8	1.292	$ 37,530	$ 10,634
	00718	2022 FORD RANGER SUPERCAP 4WD 2.3L ECOBOOST	$ 25,648	5	$ 427	2022	1.67%	236.8	236.8	1.000	$ 25,648	$ 25,221
		Waste Water System	Value Replacement Cost New Less Depreciation									$ 6,925,598.09
	Append		Less Debt									$ 565,273.00
			Less Grants, Contributions, Etc.									$ -
												$ 565,273.00
		Waste Water System	Value for System Development Fee									$ 6,360,325.09
	Append	Waste Water System	Total Equivalent Residential Unit by Capacity									8,333
		Waste Water System	= Equivalent Residential Unit (ERU) SDF									$ 763.27

[1] June 30, 2022 Financial Data
[2] June 30, 2022 Financial Data
[3] June 30, 2022 Financial Data
[4] June 30, 2022 Financial Data
[5] Percent of Asset Depreciation [3]/[1]
[6] RSMeans Index - Annual 2022 for Installed Date Appendix C
[7] RSMeans Index - Annual 2022 Appendix C
[8] Replacement Cost New Factor [7]/[6]
[9] Replacement Cost New [1]X[8]
[10] Replacement Cost New Less Depreciation ([1]-[5]) x [9]
[11] Email ad dicussions with Town Staff 10/21-25/2023

CALCULATION OF SYSTEM DEVELOPMENT FEES (Incremental)

The following chart shows the calculation of each system's (Water or Wastewater) SDF / ERU for Incremental costs, considering each project in progress which is not in the current asset inventory, for which debt has been incurred, and payments (principal and interest) that have been made through July 1, 2023.

Also shown is a comparison of the Incremental SDF / ERU based on the respective system capacity versus the total cost per existing ERU based on the system peak capacity to date to illustrate the credit (reduction of cost per ERU) for incremental customers versus the existing customer peak capacity.

For each project, the SDF cost to date versus the total cost per existing ERU must be greater than 25% for the project to be used as an incremental cost

Revision 1, November 5, 2023, adds the water plant to the list of assets

Asset	Year install	Accrued depreciation	Total Debt	RCNLD
Water Plant	2022	$417,306	$12,050,000	$171,81,194

culation of Incremental / Marginal cost based on the total principal paid to date which equates to the value of the asset to be applied on a per ERU basis for the SDF. SDF vs Total Cost must be >25%

emental / Marginal cost method is use for each project until such time as the assets are recognized in the financials.

hat time, the buy in method of cology will take over since the remaining debt is deducted from the asset value.

culation use projected end of year ERU Total to appropriately reflect projected growth.

Incremental Cost Calculation Use Only For Approved Capital Improvement Projects (Under Construction, Debt or Obligation Issued and Not in Assets)

ear	Project Description		CIP Projects	CIP Project Cost Net Grants and Contributions	Working Projects in CIP (10 Yr. Plan Capital Cost)	Working Projects (Total Including Interest)	Plan Cost (Interest)	To Date (Outstanding Debt Principal)	To Date Asset for SDF (Principal To Date)	To Date Cost & Debt Svc Existing Customers	To Date Cost & Debt Svc / ERUT*	SDF / ERUT* (Principal to Date)	Credit % Inc SDF vs Project	
											8,333	8,333		
	Water System													
023	ISR Sandremoval	VW	$1,430,000	$1,430,000	$1,430,000	$1,681,051	$231,051	$473,918	$886,082	$1,162,797	$139.54	$114.73	18%	NO
018	WW Projects	VW	$496,230	$496,230	$496,230	$611,350	$65,800	$159,686	$336,544	$386,146	$46.34	$40.39	13%	NO
	Water System													
											20,750	20,750		
018	WW Projects (New WW Proj.) **	VW	$685,270	$685,270	$685,270	$761,785	$76,515	$184,700	$800,570	$571,339	$27.53	$24.12	12%	NO
017	Bicker Dairy Road Relocation	VW	$2,037,249	$2,037,249	$2,037,249	$2,195,726	$158,477	$308,964	$1,728,285	$1,882,051	$90.70	$83.29	8%	NO

APPENDICES AND ADDITIONAL INFORMATION

GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2017 SESSION LAW 2017-138
HOUSE BILL 436

H436-v-6

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.

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(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.**

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(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
s/ Roy Cooper
Governor Approved 4:13 p.m. this 20th day of July, 2017

Appendix B

Revision 1, November 5, 2023, adds the water plant debt to the total debt.
Water Plant Debt - $12,050,000

Debt related to Assets included in Water and Waste Water					
WW	I&I Sand Removal				$250,428
WW	W&S Proj				$159,224
WW	Booker Dairy				$155,621
TOTAL					$565,273
W	I&I Sand Removal				$147,304
W	W&S Proj				$159,224
TOTAL					$306,528
					$871,801

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Appendix C

RSMeans Index January 2023 for
Calendar Year 2022 Raleigh NC Base

Year	Index		Year	Index	
2022	236.8	1.00	1999	89.4	0.38
2021	200.9	0.85	1998	87.5	0.37
2020	198.0	0.84	1997	85.7	0.36
2019	186.8	0.79	1996	83.8	0.35
2018	183.3	0.77	1995	81.8	0.35
2017	175.8	0.74	1994	79.4	0.34
2016	174.6	0.74	1993	77.3	0.33
2015	167.6	0.71	1992	75.6	0.32
2014	161.6	0.68	1991	73.6	0.31
2013	157.5	0.67	1990	75.5	0.32
2012	155.4	0.66	1989	73.7	0.31
2011	142.8	0.60	1988	72.0	0.30
2010	140.6	0.59	1987	70.2	0.30
2009	145.1	0.61	1986	67.4	0.28
2008	135.3	0.57	1985	67.6	0.29
2007	132.1	0.56	1984	67.1	0.28
2006	124.2	0.52	1983	65.6	0.28
2005	112.1	0.47	1982	62.3	0.26
2004	100.3	0.42			
2003	97.8	0.41			
2002	96.3	0.41			
2001	93.3	0.39			
2000	91.9	0.39			

Appendix D

CALCULATION OF SYSTEM EQUIVALENT RESIDENTIAL UNITS BY CAPACITY

Year 2023

Projected Growth Rate		3.0%	
Miles of Line		63	
Average Daily Use Water		2.12	MGD
Water System Capacity		8.30	MGD
Average Daily Use Waste Water		2.15	
Waste Water System Capacity		3.00	MGD

ERU By Capacity					
ERU GPD Water use	20,750	400 GPD			
ERU GPD Waste Water Use	8,333	360 GPD	0.9 X Water GPD		
Water System Capacity	8,300,000 GPD /	400	GPD / ERU =	20,750	ERU TOTAL WATER SYSTEM CAPACITY
Waste Water System Capacity	3,000,000 GPD /	360	GPD / ERU =	8,333	ERU TOTAL WASTE WATER SYSTEM CAPACITY

* NC Administrative Code 15A NCAC02T.0114 for a three bedroom home based on 120 GPD per bedroom

Water	System Capacity MGD	8.300	MGD
	System Capacity GPD	8,300,000	GPD
	Equivalent Residential Unit GPD *	400	GPD / ERU
	Total Equivalent Residential Units by Capacity	20,750	ERU (Capacity Based)

* NC Administrative Code 15A NCAC02T.0114 for a three bedroom home based on 120 GPD per bedroom

Waste Water	System Capacity MGD	3.000	MGD
	System Capacity GPD	3,000,000	GPD
	Equivalent Residential Unit GPD	360	GPD / ERU
	Total Equivalent Residential Unit by Capacity	8,333	ERU (Capacity Based)

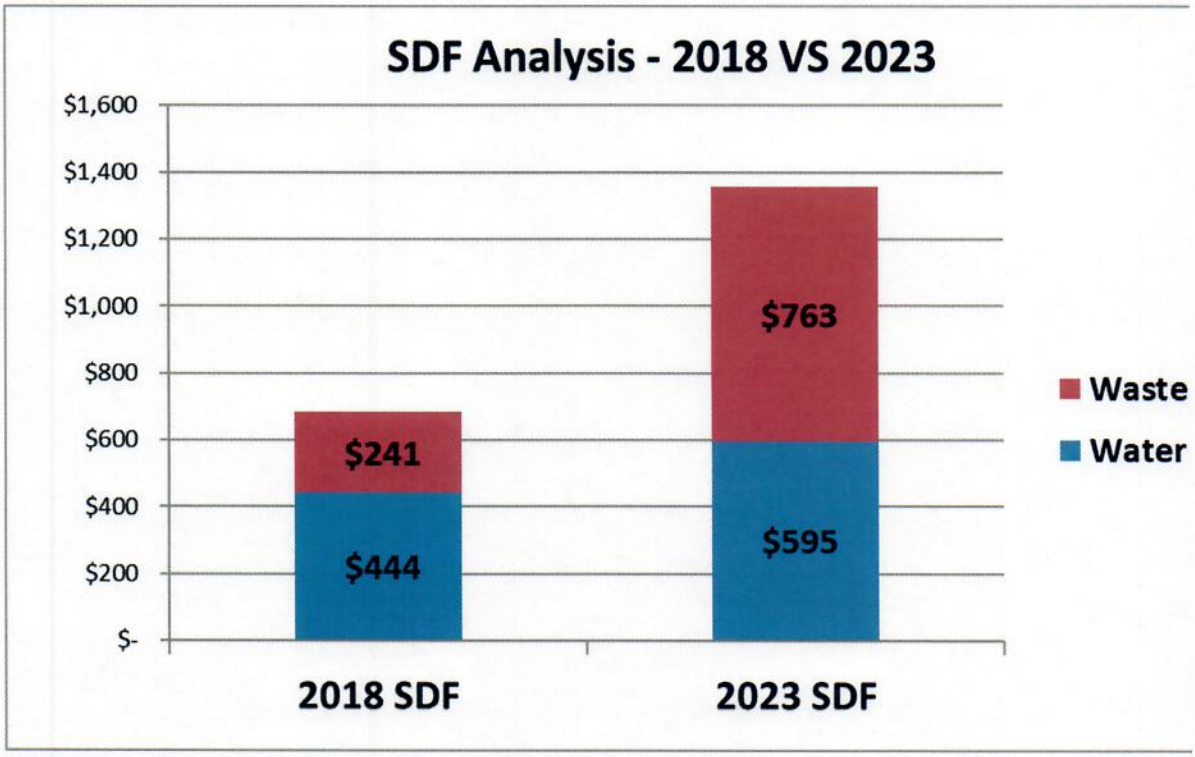
* NC Administrative Code 15A NCAC02T.0114 for a three bedroom home based on 120 GPD per bedroom X 90%

Appendix F
INCREMENTAL SDF CALCULATION

I&I SAND REMOVAL							
Loan		$1,430,000.00					
Interest		2.90%					
Year		10					
Payment		$83,056.94					
Period	Beginning Balance	Payment	Principal	Interest	Cummulative Principal	Cummulative Interest	Ending Balance
9/1/2016	$1,430,000.00	$83,056.94	$61,861.17	$21,195.77	$61,861.17	$21,195.77	$1,368,138.83
3/1/2017	$1,368,138.83	$83,056.94	$63,000.20	$20,056.74	$124,861.37	$41,252.51	$1,305,138.63
9/1/2017	$1,305,138.63	$83,056.94	$62,886.21	$20,170.73	$187,747.58	$61,423.24	$1,242,252.42
3/1/2018	$1,242,252.42	$83,056.94	$63,876.72	$19,180.22	$251,624.30	$80,603.46	$1,178,375.70
9/1/2018	$1,178,375.70	$83,056.94	$65,970.49	$17,086.45	$317,594.79	$97,689.91	$1,112,405.21
3/1/2019	$1,112,405.21	$83,056.94	$66,927.06	$16,129.88	$384,521.85	$113,819.79	$1,045,478.15
9/1/2019	$1,045,478.15	$83,056.94	$67,897.51	$15,159.43	$452,419.36	$128,979.22	$977,580.64
3/1/2020	$977,580.64	$83,056.94	$68,882.02	$14,174.92	$521,301.38	$143,154.14	$908,698.62
9/1/2020	$908,698.62	$83,056.94	$69,880.81	$13,176.13	$591,182.19	$156,330.27	$838,817.81
3/1/2021	$838,817.81	$83,056.94	$70,894.08	$12,162.86	$662,076.27	$168,493.13	$767,923.73
9/1/2021	$767,923.73	$83,056.94	$71,922.05	$11,134.89	$733,998.32	$179,628.02	$696,001.68
3/1/2022	$696,001.68	$83,056.94	$72,964.92	$10,092.02	$806,963.24	$189,720.04	$623,036.76
9/1/2022	$623,036.76	$83,056.94	$74,022.91	$9,034.03	$880,986.15	$198,754.07	$549,013.85
3/1/2023	$549,013.85	$83,056.94	$75,096.24	$7,960.70	$956,082.39	$206,714.77	$473,917.61
9/1/2023	$473,917.61	$83,056.94	$76,185.13	$6,871.81	$1,032,267.52	$213,586.58	$397,732.48
3/1/2024	$397,732.48	$83,056.94	$77,289.82	$5,767.12	$1,109,557.34	$219,353.70	$320,442.66
9/1/2024	$320,442.66	$83,056.94	$78,410.52	$4,646.42	$1,187,967.86	$224,000.12	$242,032.14
3/1/2025	$242,032.14	$83,056.94	$79,547.47	$3,509.47	$1,267,515.33	$227,509.59	$162,484.67
9/1/2025	$162,484.67	$83,056.94	$80,700.91	$2,356.03	$1,348,216.24	$229,865.62	$81,783.76
3/1/2026	$81,783.76	$82,969.62	$81,783.76	$1,185.86	$1,430,000.00	$231,051.48	$0.00
		$415,284.70			$1,661,051.48	Total Principal & Interest	
					$473,917.61	Outstanding Debt Principal	
					$1,162,797.16	Cost to existing Customers	

W&S PROJECTS							
Loan		$1,181,500.00					
Interest		1.03%					
Year		10					
Payment		$65,671.14					
Period	Beginning Balance	Payment	Principal	Interest	Cummulative Principal	Cummulative Interest	Ending Balance
9/1/2016	$1,181,500.00	$65,671.14	$53,501.69	$12,169.45	$53,501.69	$12,169.45	$1,127,998.31
3/1/2017	$1,127,998.31	$65,671.14	$54,052.76	$11,618.38	$107,554.45	$23,787.83	$1,073,945.55
9/1/2017	$1,073,945.55	$65,671.14	$54,609.50	$11,061.64	$162,163.95	$34,849.47	$1,019,336.05
3/1/2018	$1,019,336.05	$65,671.14	$55,171.98	$10,499.16	$217,335.93	$45,348.63	$964,164.07
9/1/2018	$964,164.07	$65,671.14	$55,740.25	$9,930.89	$273,076.18	$55,279.52	$908,423.82
3/1/2019	$908,423.82	$65,671.14	$56,314.37	$9,356.77	$329,390.55	$64,636.29	$852,109.45
9/1/2019	$852,109.45	$65,671.14	$56,894.41	$8,776.73	$386,284.96	$73,413.02	$795,215.04
3/1/2020	$795,215.04	$65,671.14	$57,480.43	$8,190.71	$443,765.39	$81,603.73	$737,734.61
9/1/2020	$737,734.61	$65,671.14	$58,072.47	$7,598.67	$501,837.86	$89,202.40	$679,662.14
3/1/2021	$679,662.14	$65,671.14	$58,670.62	$7,000.52	$560,508.48	$96,202.92	$620,991.52
9/1/2021	$620,991.52	$65,671.14	$59,274.93	$6,396.21	$619,783.41	$102,599.13	$561,716.59
3/1/2022	$561,716.59	$65,671.14	$59,885.46	$5,785.68	$679,668.87	$108,384.81	$501,831.13
9/1/2022	$501,831.13	$65,671.14	$60,502.28	$5,168.86	$740,171.15	$113,553.67	$441,328.85
3/1/2023	$441,328.85	$65,671.14	$61,125.45	$4,545.69	$801,296.60	$118,099.36	$380,203.40
9/1/2023	$380,203.40	$65,671.14	$61,755.04	$3,916.10	$863,051.64	$122,015.46	$318,448.36
3/1/2024	$318,448.36	$65,671.14	$62,391.12	$3,280.02	$925,442.76	$125,295.48	$256,057.24
9/1/2024	$256,057.24	$65,671.14	$63,033.75	$2,637.39	$988,476.51	$127,932.87	$193,023.49
3/1/2025	$193,023.49	$65,671.14	$63,683.00	$1,988.14	$1,052,159.51	$129,921.01	$129,340.49
9/1/2025	$129,340.49	$65,671.14	$64,338.93	$1,332.21	$1,116,498.44	$131,253.22	$65,001.56
3/1/2026	$65,001.56	$65,671.08	$65,001.56	$669.52	$1,181,500.00	$131,922.74	$0.00
				$131,922.74	$1,313,422.74	Total Principal & Interest	
Total WW	$496,230	$551,638	42.00%	WW	$555,550.58		
Total W	$685,270		58.00%	W	$757,872.16		
Water Project Total		$761,785			$1,313,422.74		
Total	$1,181,500	$685,270					
Interest	$131,923	$76,515					
						Principal	Interest to Date
W To Date	$863,052	9/1/2023				$863,052	$122,015
					Total		$985,067
	0.58	Ratio of water projects to total					
					Princ & Interest Water Project		
Project Cost	$1,181,500.00				To Date Paid		$571,339
Prin to Date	$863,051.64	$500,570	Water Proj				
Prin Total	$988,476.51	$573,316	Water Proj				
Outstanding debt Principal		$184,700					

Booker Dairy Relocation							
Loan		$2,037,249.00					
Interest		1.02%					
Year		7					
Payment		$156,837.63					
Period	Beginning Balance	Payment	Principal	Interest	Cummulative Principal	Cummulative Interest	Ending Balance
9/23/2017	$2,037,249.00	$156,837.63	$136,159.55	$20,678.08	$136,159.55	$20,678.08	$1,901,089.45
3/23/2018	$1,901,089.45	$156,837.63	$137,541.57	$19,296.06	$273,701.12	$39,974.14	$1,763,547.88
9/23/2018	$1,763,547.88	$156,837.63	$138,937.62	$17,900.01	$412,638.74	$57,874.15	$1,624,610.26
3/23/2019	$1,624,610.26	$156,837.63	$140,347.83	$16,489.80	$552,986.57	$74,363.95	$1,484,262.43
9/23/2019	$1,484,262.43	$156,837.63	$141,772.36	$15,065.27	$694,758.93	$89,429.22	$1,342,490.07
3/23/2020	$1,342,490.07	$156,837.63	$143,211.35	$13,626.28	$837,970.28	$103,055.50	$1,199,278.72
9/23/2020	$1,199,278.72	$156,837.63	$144,664.95	$12,172.68	$982,635.23	$115,228.18	$1,054,613.77
3/23/2021	$1,054,613.77	$156,837.63	$146,133.30	$10,704.33	$1,128,768.53	$125,932.51	$908,480.47
9/23/2021	$908,480.47	$156,837.63	$147,616.55	$9,221.08	$1,276,385.08	$135,153.59	$760,863.92
3/23/2022	$760,863.92	$156,837.63	$149,114.86	$7,722.77	$1,425,499.94	$142,876.36	$611,749.06
9/23/2022	$611,749.06	$156,837.63	$150,628.38	$6,209.25	$1,576,128.32	$149,085.61	$461,120.68
3/23/2023	$461,120.68	$156,837.63	$152,157.25	$4,680.38	$1,728,285.57	$153,765.99	$308,963.43
9/23/2023	$308,963.43	$156,837.63	$153,701.65	$3,135.98	$1,881,987.22	$156,901.97	$155,261.78
3/23/2024	$155,261.78	$156,837.69	$155,261.78	$1,575.91	$2,037,249.00	$158,477.88	($0.00)
			$308,963.43		$2,195,726.88	Total Principal & Interest	


SDF Analysis - 2018 VS 2023
$1,600
$1,400
$1,200
$1,000
$800
$600
$400
$200
$-
$241
$444
$763
$595
2018 SDF
2023 SDF
Waste
Water