

# Water and Sewer System Development Fee Study

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**TOWN OF WALLACE**

April 2024

PREPARED BY THE FINANCE DEPARTMENT

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## INTRODUCTION

Town staff have conducted a Water and Sewer System Development Fee Study (Study) for the Town of Wallace's water and sewer systems (hereafter referred to as the "Town" or "Utility"). This report presents the results of the comprehensive study, including background information, legal requirements, an explanation of the calculation methodology employed, and the results of the analysis.

### 1.0 BACKGROUND

A system development fee constitutes a singular payment made by a new customer, aiming to recoup a portion or the entirety of the expenses associated with constructing water and sewer system capacity. These fees are frequently imposed on existing customers, necessitating an expansion in system capacity. In essence, these charges are determined by the costs incurred in establishing utility infrastructure, encompassing but not limited to water supply facilities, treatment facilities, effluent disposal facilities, and transmission mains. System development fees function as a mechanism to ensure that the expansion covers its own costs, thus reducing the burden on existing customers who would otherwise have to shoulder the expenses of facilities that cater to new customers.

The Town presently imposes water and sewer system development fees, designed to recuperate the expenses linked to the augmentation of water and sewer capacity for new connections to each respective system. In alignment with the North Carolina Public Water and Sewer System Development Fee Act, Session Law (S.L.) 2017-138, the Town has recalculated the system development fees for each system.

### 1.1 LEGAL REQUIREMENTS

The Public Water and Sewer System Development Fee Act, S.L. 2017-138, also known as the House Bill 436 ("HB 436") was approved on July 20<sup>th</sup>, 2017, and grants local government entities that own or operate municipal water and sewer systems the authority to assess system development fees for the provision of utility service to new development.

HB 436 defines new development as 1) subdivision of land, 2) construction or change to existing structure that increases service needs or 3) any use of land which increased service needs within 1 year (no longer than 12 months) of a development fee being adopted.

According to HB 436 the following procedural requirements need to be followed to adopt a system development fee:

- **Requirement 1 (NCGS 161A-205)** The fee should be calculated in a written analysis ("SDF Analysis") prepared by a financial professional or licensed professional engineer (qualified by experience and training or education) who employs generally accepted accounting, engineering, and planning methodologies to calculate system development fees for water and sewer systems, including the buy-in, incremental cost or marginal cost, and combined costs methods for each service. The SDF analysis should include the following:
  - Documents the facts and data used in the analysis and their sufficiency and reliability.

- Provides analysis regarding the selection of the appropriate method of analysis.
- Documents and demonstrates reliable application of the methodology to the facts and data, including all reasoning, analysis, and interim calculations underlying each identifiable component of the system development fee.
- Identifies all assumptions and limiting conditions affecting the analysis and demonstrates that they do not materially undermine the reliability of the conclusions reached.
- Calculates a system development fee per service unit of new development and includes an equivalency or conversion table to use in determining the fees applicable for various categories of demand and
- Covers a planning horizon of between 10 and 20 years.
- **Requirement 2 (NCGS 162-209)** The system development fee analysis must be posted on The Town's website, and The Town must solicit comments and provide a means by which people can submit their comments, for a period of at least 45 days.
- **Requirement 3 (NCGS 162A-209)** Comments received from the public must be considered by preparer of the system development fee analysis for possible adjustments to the analysis.
- **Requirement 4 (NCGS 162A-209)** The Town Council must hold a public hearing prior to considering adoption of the system development fees including any adjustments made as part of the comments received by The Town.
- **Requirement 5 (NCGS 162-209)** The Town must publish the system development fee schedule as part of its annual budget or fee ordinance.
- **Requirement 6 (NCGS 162-209)** The Town must update the system development fee analysis at least every five years.
- **Requirement 7 (NCGS 162A-207)** The Town cannot adopt a fee that is higher than the fee calculated by the professional analysis.

In addition to the procedural requirements listed above, HB 436 provides specific requirements pertaining to the calculation of the system development fees. These requirements are highlighted within the body of this report in concert with the calculation of the system development fees for The Town. Further, The Town must follow HB 436 when actually charging the system development fee: it *may* be charged only to "new development" and only at the time specified in the legislation; and new development must be given a credit for costs in excess of the development's proportionate share of connecting facilities required to be oversized for use of others outside of the development.

### 1.3 STUDY OBJECTIVE

The objective of this Study is to:

1. Determine the full cost recovery system development fees for water and sewer service based upon requirements created by the new Public Water and Sewer System Development Fee Act, S.L. 2017-138.

2. Provide a comparison of the system development fees calculated during the study with The Town's current system development fees.

## **1.4 GENERAL METHODOLOGY**

There are three primary approaches to the calculation of development fees, all of which are outlined within the new Public Water and Sewer System Development Fee Act, S.L. 2017-138. Each of the approaches are discussed below.

### **Buy-In Method**

This approach determines the system development fees solely on the existing utility system assets. Specifically, the replacement cost of each system's major functional components serve as the cost basis for the system development fee calculation. This approach is most appropriate for a system with considerable excess capacity, such that most new connections to the system will be served by that existing excess capacity and the customers are effectively "buying-in" to the existing system.

### **Incremental/Marginal Cost Method**

The second approach is to use the portion of each system's multi-year capital improvement program (CIP) associated with the provision of additional system capacity by functional system component as the cost basis for the development fee calculation. This approach is most appropriate where 1) the existing system has limited or no excess capacity to accommodate growth, and 2) the CIP contains a significant number of projects that provide additional system capacity for each functional system component representative of the cost of capacity for the entire system.

### **Combined Cost Method**

The third approach is a combination of the two approaches described above. This approach is most appropriate when 1) there is excess capacity in the current system that will accommodate some growth, but additional capacity is needed in the short-term as reflected in each system's CIP, and 2) the CIP includes a significant amount of projects that will provide additional system capacity, but does not necessarily have a sufficient number of projects in each functional area to be reflective of a total system.

#### **1.4.1 Methodologies & Restriction of Proceeds**

While HB 436 allows for the use of any one of the three methodologies discussed above, it specifies restrictions on how the revenues generated by the fees calculated using each methodology may be utilized. Table 1-1 summarizes each of the three methodologies, their typical application, and restriction of how the revenues can be utilized for each.

**Table 1-1 Description of Methodologies & Restriction to Proceeds**

Methodology/Approach	Description	Often Used By Systems with:	Fee Proceeds Allowed for:
<b>Buy In Method</b>	New development shares in Capital Costs previously incurred which provided capacity for demand arriving with new development needs	Excess Capacity	Expansion and/or rehabilitation projects. Since the buy-in method reimburses the system for certain past investments, proceeds can be treated as unrestricted
<b>Incremental / Marginal Cost</b>	New development share in capital costs to be incurred in the future which will provide capacity for demand arriving with new development needs	Limited or no excess capacity and a CIP which will provide significant additional capacity	Professional services costs in development of new fees and expansion costs (construction costs, debt service, capital land purchase, other costs, etc.) related to NEW DEVELOPMENT ONLY
<b>Combined Cost</b>	Combination of Buy-In and Incremental/ Marginal Cost Methods	Some Excess capacity but short term additional capacity is needed and identified in the CIP	Restricted in the same manner as the Incremental Marginal Costs Method

The Town has excess capacity in its current water and sewer systems to accommodate new development and limited defined capacity expansion is identified within the Town's capital improvement plan. Staff therefore recommend using the Buy-In Cost methodology for the calculation of the system development fee for the water and sewer systems. To comply with the legislation, The Town will revisit the methodology at least every five years to determine if the methodology for each system is still the most appropriate methodology to use.

## 2.0 BASIS OF ANALYSIS

The first step in calculating water and sewer development fees is to determine the cost basis or value for each system (Water and Sewer). The net system value for use in the determination of the system development fees is calculated using the following approach.

- 1) The existing system assets are analyzed to determine the replacement cost new less depreciation (RCNLD) of The Town's existing major water and sewer system components.
- 2) Addition of growth-related capital project spending over the next 10 years for the water system (due to the use of the combined approach). This includes projects designated to add new capacity to the system, whether partially or entirely.
- 3) Any donated assets and/or assets not funded by The Town (funded by grants, developers, etc.) are removed from the system assets.
- 4) The assets are further reduced by the outstanding net present value of the principal on

debt for each system.

- 5) The resulting net system value is used in the determination of the fee.

The following section outlines the details of the analysis completed during the Study to calculate the water and sewer system development fees.

## 2.1 TOTAL SYSTEM VALUE

The system value begins with reviewing the summary asset inventory list of the Town's water, sewer, and wastewater treatment facilities. This list contains a description of the asset category, year placed in service, original cost, and useful life for each asset through FY 2023. These assets were classified by each major system function, and a replacement cost new less depreciation was calculated for each asset record using the data provided by The Town and the Engineering News Record Construction Cost Index. Schedule 5 in the Appendix shows the RCNLD for The Town's existing water and sewer systems based upon the asset records provided by Town staff.

As part of the process, the Town's capital improvements plan (CIP), which included the project description, total spending, and an indication of whether the project was designated for expansion or rehabilitation, was also reviewed, and considered. The CIP includes two projects that will expand the sewer collection system. Review of the Town's Capital Improvement Plan revealed that The Town currently has no planned capital projects that will expand the capacity of the water system. Therefore, only the two projects noted above were included in the system value given the use of the Buy In Method for determining the sewer system development fees. The CIP was classified by each major system function, similar to the assets. Schedule 6 in the Appendix shows the CIP included in the total sewer system value for purposes of determining the water system development fee.

## 2.2 CREDITS

HB 436 requires that the system development fee calculations include provisions for credits against the value of the system to account for assets that were not funded by the municipality and for assets with outstanding debt liabilities. The credits included in this study are discussed below.

### *Principal on Outstanding Debt.*

Once the system values were identified for each functional component, an adjustment was then made in the form of a credit for the net present value of the principal of all outstanding debt that will be recovered in usage rates after new customers connect to the water and/or sewer systems. Upon connection to either system, new customers will pay monthly usage rates associated with the use of utility service. In addition to the systems' operating costs, the user rates recover the principal and interest payments associated with the debt incurred to fund the capital costs of each water and sewer system. Therefore, to avoid a double recovery of those capital costs in the system development fees and user rates, a credit is provided based on the total principal outstanding on debt for each of the water and sewer systems, respectively.

### *Contributed and Grant Funded Assets*

Water and sewer system assets that were donated to The Town or funded with grants must be excluded from the system development fee calculation. If The Town did not incur the cost of purchasing and/or constructing the asset, they cannot legitimately include the costs in the system value used to determine the system development fee.

HB 436 requires that the total credit applied in the system development fee calculations be equal to at least 25% of the total system value when the Combined or Incremental Cost Methods are utilized. This minimum credit threshold does not apply to the Buy-in Method. Table 2.1 presents the determination of the net system value given the credit for debt service and donated assets.

**Table 2-1 Credits by System**

System	Total System Value	NPV of Principal Outstanding	Contributed Assets	Total Credits/% of Value	Net System Value
Water	\$ 6,690,307	\$ (3,280,201)	\$ -	\$ (3,280,201) -49%	\$ 9,970,508
Sewer	\$ 39,864,004	\$ (2,360,983)	\$ (3,779,129)	\$ (6,140,112) -15%	\$ 46,004,116

## 2.3 CAPACITIES

Once the system values were determined and allocated to each system and its functional components, the next step was to determine the water and sewer system capacities by functional cost component as stated in terms of equivalent residential units (ERUs). Expressing the system capacities in terms of ERUs allows for the development of the unit pricing of capacity which is essential for the determination of system development fees. The total system capacity (treatment capacity in million gallons per day for each system) divided by the level of service in gallons per day is equal to the total number of ERUs The Town can serve with the existing system capacity.

### 2.3.1 System Capacity

The Town's water and sewer systems consist of numerous functional components such as water treatment, source of supply, transmission, and storage. Each of the functional components has a physical or regulatory permitted capacity. While treatment, supply, and disposal capacities are readily available and generally accepted to be the physical or regulatory permitted capacity of such facilities, transmission system capacities are more difficult to quantify.

As such, it is common to define the capacity for all functional components (including the transmission facilities) based on the system's total treatment capacity. This approach was utilized for the determination of the system capacities of The Town's utility systems. The rationale behind this decision is that even if the transmission and pumping portion of either system is larger than that system's treatment capacity, the maximum capacity the system can offer to its connections is its total treatment capacity. For The Town's water system, the current supply system is permitted for a peak day design capacity of 2.31 million gallons per day (MGD). The Town's wastewater treatment plant is permitted for 5.42 MGD.



**Table 2-2 System Capacity by Function**

	Water Capacity (MGD)		Sewer Capacity (MGD)	
	Source of Supply	Distribution	Collection	Treatment
<b>Current and Future Capacity</b>	2.31	2.31	5.42	5.42

The Town's WWTP is permitted for 5.42 MGD but has averaged 1.41 MGD the last 8 years

### 2.3.2 Level of Service Standards

In the evaluation of the capital facility needs for providing water and sewer utility services, it is critical that a Level of Service (LOS) standard be developed. The LOS is an indicator of the extent or degrees of service provided by, or proposed to be provided by a facility, based on, and related to the operational characteristics of the facility. Level of service indicates the capacity per unit of demand for each public facility or service. Level of service standards are established to ensure that adequate facility capacity will be provided for future development and for purposes of issuing development orders or permits.

For water and sewer service, the level of service that is commonly used in the industry is the amount of capacity allocable to an ERU expressed as the amount of usage in gallons on an average day, maximum month, or peak day basis. This allocation would generally represent the amount of capacity allowable to an ERU, whether such capacity is actually used on an average day basis. For The Town, we are using the North Carolina state standard of 120 gallons per day per bedroom. For our calculations we assumed a house with 3 bedrooms per ERU, resulting in a level of service of 360 gpd. The level of service utilized as part of this process represents average daily usage per ERU and is shown in Table 2-3 below.

To account for the variations in demands that are potentially placed on the water and sewer systems by customers joining the respective systems, it is important to establish a system development fee schedule that is aligned with potential use of each system. The most common approach within the utility industry is to scale the fees based on the size of the new water meter that is connecting to the system. The scaling of the system development fee by meter size thus effectively reflects the potential demand on the system associated with each meter. (i.e., the larger the meter, the more capacity that can be drawn on the system). The American Water Works Association (AWWA) publishes meter equivalency factors that reflect the hydraulic capacity of each meter. This approach is consistent with the industry standards and is an acceptable means of determining the fees based on potential use of the system as defined by the maximum flow rate of the water meter. Table 2-4 presents the basis for the scaling factors and the resulting ERUS.

**Table 2-3 Level of Service by System Component**

Water		Sewer	
Source of Supply	Distribution	Collection	Treatment
360 GPD	360 GPD	360 GPD	360 GPD

Table 2-4 Equivalent Residential Unit Scaling

Meter Size	Maximum Flow Rate (GPM)	Equivalent Residential Units (ERUs)
3/4 "	30	1.00
1"	50	1.67
2"	160	5.33
4"	630	21.00
6"	1,300	43.33
8"	2,800	93.33

### 3.0 RESULTS

This section summarizes the results of the Study, the existing and calculated system development fees, and conclusions and recommendations.

#### 3.1 EXISTING WATER AND SEWER FEES

The Town currently charges system development by meter size for the water system, and per gallon per day for the sewer system. The tables below summarize the existing fees The Town currently charges:

Table 3-1 Existing Water System Development Fees

Meter Size	Existing Fee
3/4 "	\$ 1,462
1"	\$ 1,766
2"	\$ 5,851
4"	\$ 10,535
6"	\$ 14,632
8"	\$ 19,509

Table 3-2 Existing Sewer System Development Fees

Meter Size	Existing Fee
3/4 "	\$ 2,049
1"	\$ 2,340
2"	\$ 7,022
4"	\$ 11,705
6"	\$ 14,632
8"	\$ 19,509

**The Town has offered a 50% discount on the above water and sewer system development fees for the last three years.**

### 3.2 UPDATED SYSTEM DEVELOPMENT FEE AMOUNTS

To calculate the system development fees, the net system value described in Section 2 for each functional component was divided by the capacity for each functional component stated in ERUs to determine the capacity cost per ERU for the water system. For the sewer system, the net system capacity developed in Section 2 was divided by the permitted capacity to calculate a capacity cost per gallon per day. The Town currently defines an ERU as a single-family residential customer with a 3/4" meter size connection. The unit cost per ERU or system development fee per a 3/4" meter connection is then scaled by meter size to develop the system development fee schedule for all applicable meter sizes for the water system. Schedules 2 and 3 in the Appendix provide a summary of the calculated water and sewer system development fees.

Table 3-3 provides a schedule of the existing and calculated water system development fees based upon the cost and capacity information discussed herein by meter size. The scaling of the system development fee by meter size is intended to reflect the potential demand associated with each meter. It is common industry practice to utilize hydraulic meter equivalents established by the American Water Works Association (AWWA) to scale system development fees. The Town's current water system development fees are scaled by meter size by factors that are close to the meter equivalents established by AWWA but don't match exactly for each meter. The calculated water system development fees in Table 3-3 are scaled based on the AWWA meter equivalents to comply with industry standards.

Table 3-4 provides a schedule of the calculated sewer system development fees based upon the cost and capacity information discussed herein by gallon per day.

**Table 3-3 Water System Development Fee Schedule**

Meter Size	Existing Fee	Calculated Fee	Difference
3/4 "	\$ 1,462	\$ 1,616	\$ 154
1"	\$ 1,766	\$ 2,699	\$ 933
2"	\$ 5,851	\$ 8,613	\$ 2,762
4"	\$ 10,535	\$ 33,936	\$ 23,401
6"	\$ 14,632	\$ 70,021	\$ 55,389
8"	\$ 19,509	\$ 150,821	\$ 131,312

**Table 3-4 Sewer System Development Fee Schedule**

Meter Size	Existing Fee	Calculated Fee	Difference
3/4 "	\$ 2,049	\$ 2,917	\$ 868
1"	\$ 2,340	\$ 4,871	\$ 2,531
2"	\$ 7,022	\$ 15,547	\$ 8,525
4"	\$ 11,705	\$ 61,253	\$ 49,548
6"	\$ 14,632	\$ 126,385	\$ 111,753
8"	\$ 19,509	\$ 272,225	\$ 252,716

Table 3-5 below shows the existing and calculated water and sewer combined system development fee for a residential ERU, assuming a 3 bedroom house using 120 gallons per day per bedroom for the sewer system.

**Table 3-5 Combined System Development Fee**

Meter Size	Existing Fee	
3/4 "	\$	4,533
1"	\$	7,570
2"	\$	24,160
4"	\$	95,189
6"	\$	196,406
8"	\$	423,046

It is important to note that The Town has discretion regarding the percentage of cost recovery utilized in the establishment of the system development fees. The system development fees can recover any amount up to, but not in excess of, the full cost recovery amounts identified herein.

#### **4.0 CONCLUSIONS AND RECOMMENDATIONS**

Based upon the analysis presented herein, we have developed the following conclusions and recommendations:

1. Adopt the water and sewer system development fees as demonstrated in Tables 3-3 and 3-4.
2. The Town reviews its development fees at least every five years to ensure that it follows requirements established by the Public Water and Sewer System Development Fee Act, S.L. 2017-138 and to ensure that they remain fair and equitable and continue to reflect its current cost of capacity. As The Town continues to expand its facilities, future changes in technology, demands, development patterns, or other factors may necessitate additional adjustments to its development fees.
3. As part of any system development fee update, The Town also evaluates the most appropriate accepted methodology for calculating its system unit cost of capacity as system capacity may change over time.

## **APPENDIX: SUPPORTING SCHEDULES**

Schedule 1 Control Panel

Schedule 2 Water System Development Fee Calculation

Schedule 3 Sewer System Development Fee Calculation

Schedule 4 Current and Calculated System Development Fees by Meter Size

Schedule 5 Asset Listing, RCNLD System and Functional Allocations

Schedule 6 Capital Improvement Program

Schedule 7 NPV of Total Outstanding Debt Service Used in Credit Calculation

### **Schedule 1: System Development Fee Overview**

**Schedule 1: System Development Fee Overview**

Water System Development Fee		Sewer System Development Fee		Total System Development Fee	
Total Plant In Service		Total Plant In Service		Water SDF	\$ 1,462
Expansion Capital Costs		Expansion Capital Costs		Sewer SDF	\$ 2,049
Total Costs Buy In Method	\$ -	Total Costs Buy In Method	\$ -	Total Current Fee	\$ 3,511
Cost per ERU		Cost per ERU		Calculated	
Debt Service Credit		Debt Service Credit		Water SDF	\$ 1,616
Cost Recovery Percentage	100.00%	Cost Recovery Percentage	100.00%	Sewer SDF	\$ 2,917
Total Calculated Fee:	\$ 1,616	Total Calculated Fee:	\$ 2,917	Total Calculated SDF	\$ 4,533
Current Fee	\$ 1,462	Current Fee	\$ 2,049	Dollar Change	\$ 1,022
Dollar Change	\$ 154	Dollar Change	\$ 868	Percentage Change	29.10%
Percentage Change	10.53%	Percentage Change	42.35%		

  

Water	Sewer	Combined Fee
Total Calculated Fee: \$1,616 Current Fee: \$1,462 Dollar Change: \$154 Percentage Change: 10.53%	Total Calculated Fee: \$2,917 Current Fee: \$2,049 Dollar Change: \$868 Percentage Change: 42.35%	Total Calculated SDF: \$4,533 Dollar Change: \$1,022 Percentage Change: 29.10%

## Schedule 2: Water System Development Fee Calculation - 2024

Functional Component	Source of Supply/Treatment	Distribution	Total
Plant in Service Value	\$ 5,634,398	\$ 1,055,909	\$ 6,690,307
Donated & Contributed Assets	\$ -	\$ -	\$ -
Capital Improvement Cost		\$ -	\$ -
<b>Total System Value(including CIP)</b>	<b>\$ 5,634,398</b>	<b>\$ 1,055,909</b>	<b>\$ 6,690,307</b>
Credits			
Donated & Contributed Assets	\$ -	\$ -	\$ -
NPV of Debt Service Principal Credit	\$ (2,372,229)	\$ (907,972)	\$ (3,280,201)
<b>Net System Value</b>	<b>\$ 3,262,169</b>	<b>\$ 147,937</b>	<b>\$ 3,410,106</b>
Capacity:			
Million Gallons Per Day (MGD)	2.31	2.31	
Level of Service (GPD)	360	360	
Equivalent Residential Units - ERU	6,417	6,417	
Fee Calculation:			
Calculated Costs Per ERU	878	165	1,043
Credit for Debt Service Included in Usage Rates	370	142	511
<b>Calculated Fee per ERU after Debt Service Credit</b>	<b>1,248</b>	<b>306</b>	<b>1,554</b>
Reduction for Contingency	0.00%	-	-
Percentage of Full Cost Recovery	100.00%	1,248	306
Escalation Factor to Effective Year	4.00%	1,298	318
<b>Calculated Fee</b>			<b>1,616</b>
Current Fee		\$	1,462
\$ Change		\$	154
Percent Change			11%

### Schedule 3: Sewer System Development Fee Calculation - 2024

Functional Component	Collection	Treatment	Total
Plant in Service Value	\$ 8,031,007	\$ 31,832,998	\$ 39,864,004
Donated & Contributed Assets	\$ (3,779,129)		\$ (3,779,129)
Capital Improvement Cost			\$ -
<b>Total System Value(including CIP)</b>	<b>\$ 4,251,878</b>	<b>\$ 31,832,998</b>	<b>\$ 36,084,875</b>
<b>Credits</b>			
Donated & Contributed Assets	\$ (3,779,129)	\$ -	\$ (3,779,129)
NPV of Debt Service Principal Credit	\$ (162,340)	\$ (2,198,643)	\$ (2,360,983)
<b>Net System Value</b>	<b>\$ 310,409</b>	<b>\$ 29,634,355</b>	<b>\$ 29,944,764</b>
<b>Capacity:</b>			
Million Gallons Per Day (MGD)	5.42	5.42	
<b>Fee Calculation:</b>			
Calculated Costs Per Gallon	0.78	5.87	6.66
Credit for Debt Service Included in Usage Rates	0.73	0.41	1.13
<b>Calculated Fee after Debt Service Credit</b>	<b>1.51</b>	<b>6.28</b>	<b>7.79</b>
Reduction for Contingency	0.00%	-	-
Percentage of Full Cost Recovery	100.00%	1.51	6.28
Escalation Factor to Effective Year	4.00%	1.57	6.53
<b>Calculated Fee per ERU</b>			<b>8.10</b>
Residential Fee	360	\$	2,917
Current Fee		\$	2,050
\$ Change		\$	867
Percent Change			42%



## Schedule 4: Current System Development Fees by Meter/Line Size

WATER			SEWER		
RESIDENTIAL			RESIDENTIAL		
\$		1,462	\$		2,049
COMMERCIAL/INDUSTRIAL			COMMERCIAL/INDUSTRIAL		
1"	\$	1,766	1"	\$	2,340
2"	\$	5,851	2"	\$	7,022
4"	\$	10,535	4"	\$	11,705
6"	\$	14,632	6"	\$	14,632
8"	\$	19,509	8"	\$	19,509

*Town Council temporarily reduced System Development by 50% of the above rates*

Schedule 5: Asset Listing, RCNLD System and Functional Allocations

Asset Description	Original Cost	Year Acquired*	Life of Asset	Annual Depreciation	Accumulated Depreciation	Net Book Value	ENR Escalation Factor	RCNLD	Exclude	Allocation of RCNLD Costs						
										Water System		Sewer System				
										Supply	Distribution	Collection	Treatment			
<b>WATER</b>																
Water Tower - Tin City	996,500	2007	50	19,930	338,810	657,690	2.10	\$ 1,381,149				\$ 1,381,149				
Water Tower - Town Hall	100,000	1960	50	2,000	100,000	-	1.75	\$ -				\$ -				
Water Tower - Godwin	100,000	2012	50	2,000	24,000	76,000	1.25	\$ 95,000				\$ 95,000				
Well 15 Eastwood	1,100,000	2024	40	-	-	1,100,000	1.00	\$ 1,100,000				\$ 1,100,000				
Well 16 Tin City	1,100,000	2024	40	-	-	1,100,000	1.00	\$ 1,100,000				\$ 1,100,000				
Well Anns Lane	100,000	1999	40	2,500	62,500	37,500	1.69	\$ 63,375				\$ 63,375				
Well 14	100,000	1980	40	2,500	110,000	-	1.69	\$ -				\$ -				
Well Tin City	388,473	1985	40	9,712	378,768	9,705	1.75	\$ 16,984				\$ 16,984				
Well and Reservoir	-	1999	50	-	-	-	1.85	\$ -				\$ -				
Well Orange Street	100,000	1980	40	2,500	110,000	-	3.05	\$ -				\$ -				
Godwin Mill	100,000	1980	40	2,500	110,000	-	3.05	\$ -				\$ -				
Distribution System	1,462,536	1980	75	19,500	858,021	604,515	3.05	\$ 1,843,770				\$ 1,843,770				
Equipment	38,898	2022	5	38,398	7,880	31,018	1.10	\$ 34,120				\$ 34,120				
AMI meters and software	1,199,896	2023	5	239,979	239,979	959,917	1.10	\$ 1,055,909				\$ 1,055,909				
<b>WASTEWATER</b>																
Miscellaneous Equipment	235,463	2020	5	47,093	235,463	-	1.50	\$ -				\$ -				
Wastewater Treatment Facility	20,908,373	2013	50	522,709	5,749,803	15,158,570	2.10	\$ 31,832,998				\$ 31,832,998				
Collection System	4,238,663	1995	75	105,967	3,073,031	1,165,632	3.05	\$ 3,555,179	\$ (303,301)			\$ 3,251,878				
<b>CONSTRUCTION WORK IN PROGRESS</b>																
Tin City Lift Station upgrade	1,000,000	2025	50					\$ 1,000,000	\$ -			\$ 1,000,000				
830 Project	3,453,500	2025	50					\$ 3,475,828	\$ (3,475,828)			\$ -				
<b>Totals</b>	<b>\$ 36,722,302.00</b>			<b>1,017,288</b>	<b>11,398,254</b>	<b>20,900,548</b>	<b>32</b>	<b>\$ 46,554,311</b>	<b>\$ (3,779,129)</b>			<b>\$ 46,554,311</b>			<b>\$ 4,251,877.59</b>	<b>\$ 31,832,997.89</b>
									<b>Total Allocated fixed Assets \$ 5,634,397.93 \$ 1,055,908.70 \$ 4,251,877.59 \$ 31,832,997.89</b>							

\* Fixed Assets are combined into major components where detail was unavailable.

**Schedule 6: Capital Improvement Plan**

Project Name/Description	Total Cost	Expansion %	Capacity Increase (MGD)
<b>WATER</b>			
<b>SEWER &amp; WWTP</b>			
Tin City Lift Station Upgrade	\$ 1,000,000	NA	0.58
830/Maple Creek Lift Station Upgrade & Force Main	\$ 3,475,828	NA	1.00

**Schedule 7: NPV of Total Outstanding Debt Service Used in Credit Calculation**

<b>Fiscal Year Ending</b>	<b>Water</b>	<b>Sewer</b>
2024	\$201,173.93	\$317,426.39
2025	\$305,565.35	\$307,464.53
2026	\$304,539.53	\$297,815.32
2027	\$303,460.34	\$288,468.92
2028	\$302,332.72	\$279,415.85
2029	\$119,966.13	\$278,925.61
2030	\$118,845.70	\$278,450.76
2031	\$117,737.58	\$277,990.81
2032	\$116,596.91	\$13,750.46
2033	\$115,555.92	\$10,806.50
2034	\$114,483.90	\$10,467.36
2035	\$113,423.64	
2036	\$112,344.30	
2037	\$111,336.70	
2038	\$110,310.97	
2039	\$109,296.52	
2040	\$108,274.38	
2041	\$107,300.14	
2042	\$106,318.72	
2043	\$105,348.08	
2044	\$104,379.41	
2045	\$17,902.55	
2046	\$17,902.55	
2047	\$17,902.55	
2048	\$17,902.49	
2049		
2050		
2051		
2052		
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2063		
2064		
2065		
2066		
2067		
<b>Totals</b>	<b>\$ 3,280,201.00</b>	<b>\$ 2,360,982.51</b>