

Town of Haw River, NC

Water and Sewer System Development Fee Study





Agenda

1. Why Water and Sewer System Development Fees (SDFs)?
2. Calculation of Maximum Allowable Fees
3. Proposed Water and Sewer SDFs & Uses of SDF Revenue
4. Next Steps in Adoption Process



Why implement Water and Sewer SDFs?

- Existing or planned growth is placing increased demands on the utility system
- Minimize the extent existing customers must bear the costs of additional infrastructure that will be used to service new development

Rates

- Ongoing charges for the consumption of water or sewer services
- Cover the operational and maintenance costs of the utility system.

Connection Fees

- Charges for physically connecting a property to the water or sewer system.
- Cover the cost of labor, materials, and administrative expenses associated with making the connection.

SDFs

- One-time charges imposed on new development
- Recover the costs of infrastructure investments needed to provide additional capacity for growth.



Calculation of **Water** and **Sewer** SDFs

- If adopting a Water and/or Sewer SDF, process is legislated in North Carolina
 - Public Water & Sewer System Development Fee Act (NC General Statutes - Chapter 162A Article 8; 2017)
- Must perform a System Development Fee Analysis to determine fees.

$$\text{System Development Fee} = \frac{\text{Cost Basis (System Value – Credits)}}{\text{Service Units (Capacity / Level of Service)}}$$



Allowable SDF Methodologies

Methodology	Description	Appropriate For
Buy-In Method	Fees are based on cost of constructing existing utility system	System with existing capacity, and/or limited growth-related projects on CIP
Incremental Cost Method	Fees are based on cost to construct planned, growth-related capital improvements	System with limited or no existing capacity, and CIP has several growth-related projects
Combined Method	Fees are based on cost of existing system & planned, growth-related capital improvements	System with existing capacity to sell and planning to undertake growth-related capital projects on CIP



Buy-In Method SDF Calculation

1. Determine Total Value of System

- Replacement Cost New Less Depreciation of existing system assets
 - Excluded non-core assets, such as master plans and studies, equipment, furniture, and supplies

2. Apply Credits

- Donated/contributed assets not funded by the Utility
- Outstanding principal on existing debt

3. Establish Service Units

- Physical/regulated system capacity (million gallons per day) divided by the level of service (gallons per day)
 - 120 gal/day/bedroom for water; 75 gal/day/bedroom for sewer.
 - 3-bedroom house
- Expressed in ERUs



Water SDF Buy-In Method Calculation

	Transmission/ Distribution	Maximum Allowable Fee
Gross Plant in Service Value	\$10,820,661	\$10,820,661
Total Value	\$10,820,661	\$10,820,661
<i>Less Credits</i>		
Outstanding Debt Principal	-	-
Donated and Non-Core System Assets	(\$3,410,830)	(\$3,410,830)
Net System Value	\$7,409,830	\$7,409,830
System Capacity - Million Gallons/Day	0.7	0.7
Level of Service per ERU (gallons/day)	360	360
Equivalent Residential Units (ERU)	1,944	1,944
System Development Fee Per ERU	\$3,811	\$3,811



Sewer SDF Buy-In Method Calculation

	Collection/ Transmission	Maximum Allowable Fee
Gross Plant in Service Value	\$17,041,368	\$17,041,368
Total Value	\$17,041,368	\$17,041,368
<i>Less Credits</i>		
Outstanding Debt Principal	(\$884,896)	(\$884,896)
Donated and Non-Core System Assets	(\$5,539,750)	(\$5,539,750)
Net System Value	\$10,616,723	\$10,616,723
System Capacity - Million Gallons/Day	1.0	1.0
Level of Service per ERU (gallons/day)	225	225
Equivalent Residential Units (ERU)	4,444	4,444
System Development Fee Per ERU	\$2,461	\$2,461



Scaling of SDFs

- Applied based on units of service (represents potential demand)
- Often scaled by meter size based on hydraulic capacity significantly of meter
- Consistent with current practice, recommend the use of meter size for both water and wastewater SDFs
 - For residential land uses, Utility may decide to charge SDFs on a per bedroom basis

Meter size	Equivalent Residential Units (ERU)
3/4"	1.00
1"	1.67
1 1/2"	3.33
2"	5.33
3"	11.67
4"	16.67
6"	33.33
8"	53.33



Calculated Maximum SDF by Land Use

Non-Residential

Meter size	ERU	Calculated Max Water SDF	Calculated Max Sewer SDF	Calculated Max Combined SDF
3/4"	1.00	\$3,811	\$2,461	\$6,272
1"	1.67	\$6,352	\$4,101	\$10,453
1 1/2"	3.33	\$12,703	\$8,202	\$20,906
2"	5.33	\$20,325	\$13,124	\$33,449
3"	11.67	\$44,462	\$28,708	\$73,169
4"	16.67	\$63,517	\$41,011	\$104,528

**Connections requiring larger meters would be scaled accordingly based on meter size.*

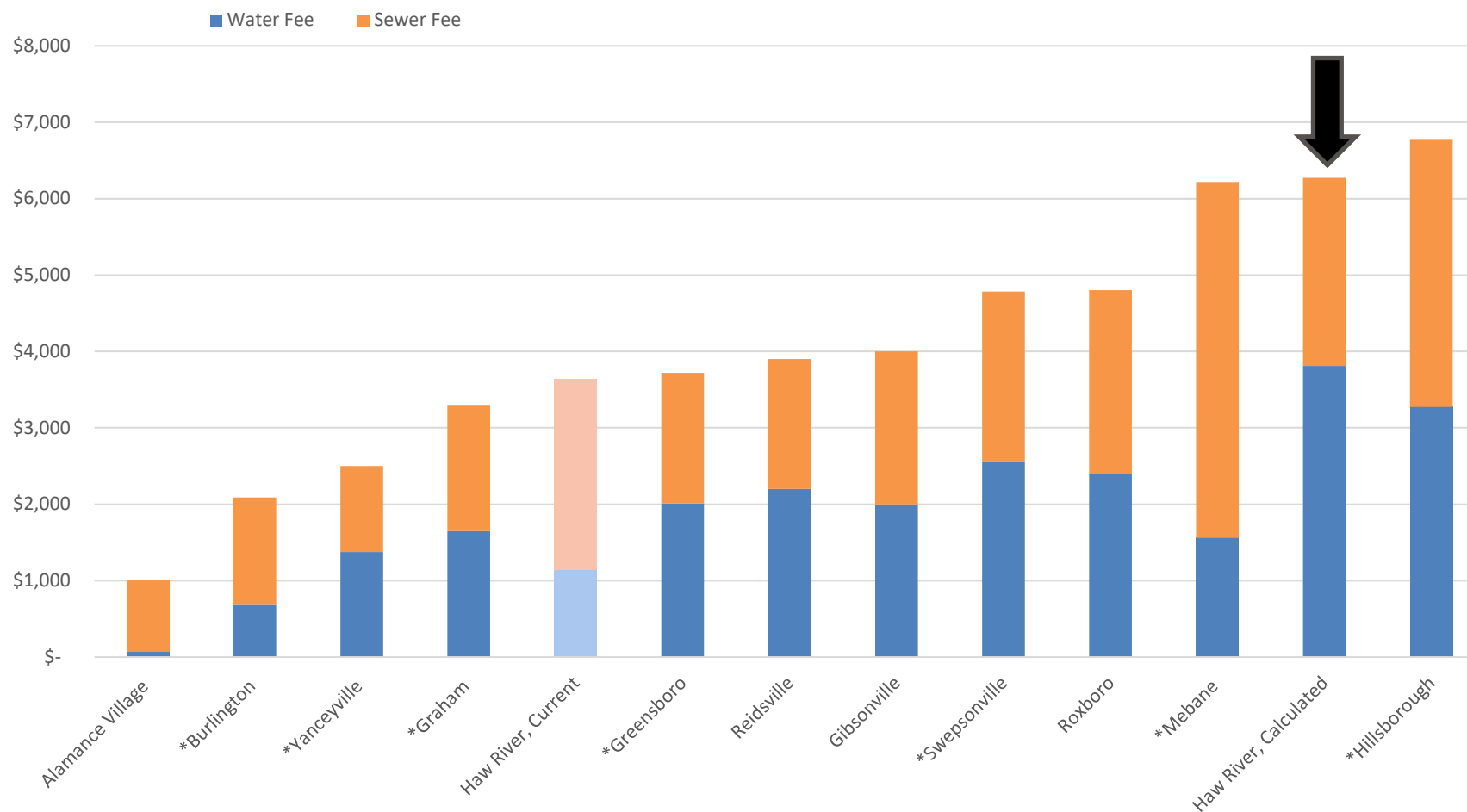
Residential

Type	ERU	Calculated Max Water SDF	Calculated Max Sewer SDF	Calculated Max Combined SDF
Per Bedroom	.33	\$1,270	\$820	\$2,091

**One ERU assumes a 3-bedroom unit.*



Benchmarking



- Assumes 1 ERU is 3 bedroom unit
- 1 ERU is $\frac{3}{4}$ " meter equivalent
- Asterisk indicates an application of SDF by land use
- Peer SDFs reflect those adopted, not necessarily to calculated full recovery.



Utilization of SDF Revenues

Water and **Sewer** SDF revenues will be used for future rehabilitation projects or expansion projects, including to pay debt related to existing assets.

Benefits

- Equity between existing and new customers
- Development pay its own way
- Recoup previous expansion costs funded by existing ratepayers
- Funding source for system expansion
- Minimize debt



Next Steps

1. Post the Water and Sewer SDF Report on Town website for 45-day public comment period and address comments.
2. Town Council to consider proposed Fee Schedule for Water and Sewer SDFs as part of public hearing with monthly meeting.
3. In the future, the Water and Sewer SDF Fee Schedule and policy document will be reviewed and updated annually.
4. Town must analyze the SDF amounts at least once every 5 years to ensure compliance with the SDF Act found in NC General Statutes.



Thank you

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