

TOWN OF KURE BEACH
SYSTEM DEVELOPMENT FEES
AS OF DECEMBER 31, 2023

SUMMARY OF N.C.G.S. CHAPTER 162A, ARTICLE 8

North Carolina General Statutes, Chapter 162A, Article 8 (Public Water and Sewer System Development Fee Act), permits a local government utility provider to assess certain costs of developing and maintaining its water and/or wastewater systems on new development that benefits from those systems. This law was enacted in 2017 with the intent to provide limited impact fee authority for local government water and wastewater utilities. The law grants local government utilities specific authority to assess one type of upfront charge called a System Development Fee.

Article 8 defines a System Development Fee as follows:

“A charge or assessment for service, including service provided pursuant to a wholesale arrangement between a water and sewer authority organized under Article 1 of Chapter 162A of the General Statutes and a local governmental unit, 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 System Development Fee must be calculated based on a written analysis that:

1. Is prepared by a financial professional or a licensed 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 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 Article 8.
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 five 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.
9. Uses the gallons per day per service unit that the local governmental unit applies to its water or sewer system engineering or planning purposes for water or sewer, as appropriate, in calculating the System Development Fee.

Adoption and Periodic Review

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.

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.

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.

Use and Administration of Revenue

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.

Revenue from System Development Fees calculated using the combined cost method may be expended for previously completed capital improvements for which capacity exists and for capital rehabilitation projects.

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.

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.

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 at the later of either of the following:

1. The time of application for a building permit.
2. When water or sewer service is committed by the local governmental unit.

For all other new development, the local governmental unit shall collect the System Development Fee at the earlier of either of the following:

1. The time of application for connection of the individual unit of development to the service or facilities.
2. When water or sewer service is committed by the local governmental unit.

PROCESS FOR DETERMINING WATER AND SEWER SYSTEM DEVELOPMENT FEES FOR KURE BEACH

A common legal consideration (Rational Nexus) related to system development costs (SDC) that are used to calculate System Development Fees is establishing a reasonable relationship between the amount of the SDC and the cost associated with serving the new development. The Rational Nexus test considers the following elements:

1. A connection between new development and the new or expanded facilities required to accommodate such development.
2. Identification of the cost of new or expanded facilities.
3. Apportionment of the cost to new development in relation to the benefits it receives.

For element number one, Kure Beach Public Works Department evaluates capital improvement needs relating to water and sewer operations considering the need for new facilities to accommodate growth. These needs are incorporated into capital improvement plans. The water and sewer infrastructure has been constructed taking into account projected future growth and system demands.

Element number two, relating to the cost of new or expanded facilities, is satisfied by maintaining records of capital asset additions, disposals and improvements that are then used for financial reporting purposes and follow generally accepted accounting principles.

Element number three, apportionment of the cost to new development, is accomplished by using one of the permitted calculation methodologies.

Calculation Methodology

Article 8 identifies three possible methodologies to use in calculating the System Development Fees. These methodologies include buy-in, incremental cost or marginal cost, or a combined cost method. Based on the planning philosophies and practices followed by Kure Beach that provide for increased capacity in advance of the actual demand, the buy-in method was determined to be the best method to calculate the System Development Fees. The buy-in method is based on the value of the system's existing capacity. This methodology is typically used when the existing system has adequate capacity for current and future development. With this method, new development "buys" a proportionate share of capacity at the cost of the existing facilities. The buy-in methodology is based on the concept of achieving capital equity between existing and new customers.

Data, Assumptions and Limitations

The capital asset data used in valuing the system capacity was obtained from the capital asset accounting records that are the basis of capital asset financial reporting in accordance with generally accepted accounting principles. These records detail the original cost, accumulated depreciation and net asset (book) value of each asset. The net book value of water and sewer capital assets as of June 30, 2023 was used in the calculation and updated with capital asset additions and disposals through December 31, 2023.

Additionally, two types of valuation adjustments are applicable to determine the value of capacity. First is the debt credit. The outstanding debt relating to water and sewer operations must be deducted from the value of net assets. This is necessary because the debt service for the loans used to acquire the capital assets is included in the water and sewer operating budget and therefore are paid from revenue generated from the monthly water and sewer fees that are based on usage. As of December 31, 2023, the total outstanding debt for water and sewer operations was \$1,464,610.

The second valuation adjustment is the grant credit. This credit represents grant proceeds that were received for water or sewer capital additions and improvements. As a result, the capital assets of the Town were increased without using Town funds. The grant credit totals \$226,679 and pertains to sewer operations.

Regarding other assumptions, certain older water and sewer capital assets were identified only as “Infrastructure”. Therefore, there was no clear delineation between which assets were water capital assets and which were sewer capital assets. In these instances, the assumption used was to equally divide these assets between water and sewer operations.

Finally, a limitation in performing the calculations was whether the water and sewer capital asset listings were complete. Without any other information available relating to water and sewer capital assets, the assumption was made that the capital asset records were sufficient and, therefore, the capital asset records did not contain any material omissions.

Kure Beach Use and Administration of System Development Fees

The System Development Fees collected by the Town will be accounted for in the Sewer Expansion Reserve Fund (SERF), which is an existing capital reserve fund. Use of the System Development Fee revenue will require Town Council action to move the funds from the SERF to the Water and Sewer Fund. As a result of using the buy-in method, the associated revenue can be used for previously completed capital improvements for which capacity exists and for capital rehabilitation projects.

Qualifications of Preparer of the Written Analysis

The System Development Fee analysis was prepared by Arlen Copenhaver, Finance & Budget Officer for the Town of Kure Beach. Arlen has been a Certified Public Accountant (CPA) for over 38 years and has over 42 years of finance-related experience. Included in his experience is over 13 years of North Carolina local government finance experience that includes water and sewer financial operations, budgeting, accounting, financial reporting and rate analysis and determination for water and sewer operations.

SYSTEM DEVELOPMENT FEE ANALYSIS

Page 6 of this document summarizes the calculation of the System Development Fees for Kure Beach. The System Development Fee is divided into two components, water and sewer. Refer to page 6 for specifics of the calculation. In summary the calculated fees are:

CATEGORY	VALUE OF GALLONS PER DAY OF CAPACITY	AVERAGE DAILY USAGE (gals.)	SYSTEM DEVELOPMENT FEE
Water	\$2.0915	126.2333	\$264.02
Sewer	\$2.9374	126.3333	\$371.09
Total			\$635.11

The remaining pages of the analysis contain the documentation supporting the System Development Fees calculated on page 6.

**TOWN OF KURE BEACH
WATER AND SEWER
SYSTEM DEVELOPMENT FEES
AS OF 12/31/2023**

	(a)	(b)	(c) = (b)/30	(a) x (c)
CATEGORY	VALUE OF GALLONS PER DAY OF CAPACITY (EXHIBIT 1)	AVERAGE MONTHLY USAGE (gals.) NOTE (1)	AVERAGE DAILY USAGE (gals.)	SYSTEM DEVELOPMENT FEE
Water	\$2.0915	3,787	126.2333	\$264.02
Sewer	\$2.9374	3,790	126.3333	\$371.09
TOTAL				\$635.11

NOTES:

(1) - Average monthly usage for the three year period of 1/1/2021 to 12/31/2023 from the ICS Accounting System and Tyler Technologies Accounting System.

**TOWN OF KURE BEACH
CALCULATION OF THE VALUE OF
GALLONS PER DAY OF CAPACITY FOR WATER AND SEWER
AS OF 12/31/2023**

EXHIBIT 1

		WATER		SEWER
Total Net Book Value of Capital Assets	EXHIBIT 2	\$3,268,634		\$3,817,481
Less:				
Debt Credit	EXHIBIT 3	(\$848,772)		(\$615,838)
Grant Credit	EXHIBIT 4	\$0		(\$226,679)
Value of Capacity	(a)	\$2,419,862		\$2,974,964
Current Total Capacity (mgd) NOTE (1)	(b)	1,157,000		1,012,784
Value of Gallons Per Day Capacity	(a)/(b)	\$2.0915		\$2.9374

NOTES:

(1) - Current total capacity (million gallons per day) obtained from the Kure Beach Public Works Department.

**TOWN OF KURE BEACH
CAPITAL ASSET SUMMARY
FOR CALCULATION OF SYSTEM DEVELOPMENT FEES**

EXHIBIT 2

	<u>ORIGINAL COST</u>	<u>ACCUMULATED DEPRECIATION AS OF 12/31/23</u>	<u>NET BOOK VALUE AS OF 12/31/23</u>	<u>COMMENTS</u>
WATER				
Equipment & Vehicles	\$479,516	\$419,398	\$60,118	EXHIBIT 2-A
Infrastructure	\$5,413,763	\$2,525,514	\$2,888,249	EXHIBIT 2-B
Buildings	\$396,581	\$86,663	\$309,919	EXHIBIT 2-C
Land	\$10,349	\$0	\$10,349	EXHIBIT 2-C
Total Water Capital Assets	\$6,300,209	\$3,031,575	\$3,268,634	
SEWER				
Equipment & Vehicles	\$765,266	\$468,848	\$296,418	EXHIBIT 2-A
Infrastructure	\$5,705,723	\$2,504,927	\$3,200,796	EXHIBIT 2-B
Buildings	\$396,581	\$86,663	\$309,919	EXHIBIT 2-C
Land	\$10,349	\$0	\$10,349	EXHIBIT 2-C
Total Sewer Capital Assets	\$6,877,919	\$3,060,438	\$3,817,481	

**TOWN OF KURE BEACH
ALLOCATION OF EQUIPMENT AND VEHICLE
CAPITAL ASSETS BETWEEN
WATER AND SEWER OPERATIONS**

EXHIBIT 2-A

	<u>ORIGINAL COST</u>	<u>ACCUMULATED DEPRECIATION AS OF 12/31/23</u>	<u>NET BOOK VALUE AS OF 12/31/23</u>	<u>COMMENTS</u>
Equipment & Vehicles	\$1,244,782	\$888,246	\$356,536	Total Water & Sewer Fund Equipment & Vehicle Capital Assets From 2023 Audited Financial Statements
<u>Less Water Only Assets:</u>				
Meyers Plunger Pump	\$5,852	\$5,852	\$0	
Assembly Road Tank Altitude Value	\$46,803	\$46,803	\$0	
Telemetry System - Water Tanks/Wells	\$81,061	\$31,073	\$49,988	
Total Water Only Assets	\$133,716	\$83,728	\$49,988	
<u>Less Sewer Only Assets:</u>				
O'Brien Hydrojetter	\$40,472	\$40,472	\$0	
Generator - Riggings lift station	\$22,511	\$22,511	\$0	
Sewer System Imaging Camera	\$10,236	\$10,236	\$0	
2012 Doosan Generator (437)	\$21,944	\$10,606	\$11,338	
2012 Doosan Generator (443)	\$21,944	\$10,606	\$11,338	
DRI - Prime CD100S Diesel Pump	\$27,887	\$8,599	\$19,288	
Kohler Generator - Ocean Dunes	\$19,380	\$5,491	\$13,889	
Kohler Generator - KB Village	\$35,064	\$8,766	\$26,298	
2023 Vacuum Truck	\$220,028	\$15,891	\$204,137	
Total Sewer Only Assets	\$419,466	\$133,178	\$286,288	
Equipment & Vehicles To Be Divided Equally Between Water & Sewer	\$691,600	\$671,340	\$20,260	
Allocation of Equipment & Vehicles:				
Water:				
Assets Shared With Sewer	\$345,800	\$335,670	\$10,130	
Total Water Only Assets	\$133,716	\$83,728	\$49,988	
Total Equipment & Vehicles - Water	\$479,516	\$419,398	\$60,118	
Sewer:				
Assets Shared With Water	\$345,800	\$335,670	\$10,130	
Total Sewer Only Assets	\$419,466	\$133,178	\$286,288	
Total Equipment & Vehicles - Sewer	\$765,266	\$468,848	\$296,418	

**TOWN OF KURE BEACH
ALLOCATION OF INFRASTRUCTURE
CAPITAL ASSETS BETWEEN
WATER AND SEWER OPERATIONS**

EXHIBIT 2-B

	ORIGINAL COST	ACCUMULATED DEPRECIATION AS OF 12/31/23	NET BOOK VALUE AS OF 12/31/23	COMMENTS
Infrastructure	\$11,119,485	\$5,030,441	\$6,089,044	Total Water & Sewer Fund Infrastructure Capital Assets From 2023 Audited Financial Statements
Less Water Only Assets:				
Ft. Fisher Water Line Extension	\$30,792	\$7,801	\$22,991	
Town-Wide Water Meters	\$1,248,593	\$332,958	\$915,635	
Total Water Only Assets	\$1,279,385	\$340,759	\$938,626	
Less Sewer Only Assets:				
Sewer System Improvements (3/8/11)	\$73,753	\$18,192	\$55,561	
Sewer System Improvements (1/6/12)	\$5,000	\$1,150	\$3,850	
Sewer Treatment Dechlorification	\$14,147	\$14,147	\$0	
SeaView Sewer Infrastructure	\$8,000	\$1,267	\$6,733	
Bypass Force Main	\$204,318	\$32,776	\$171,542	
Riggings Lift Station Pump	\$29,845	\$14,922	\$14,923	
Kure Beach Pump station #1	\$811,420	\$170,398	\$641,022	
1400 FF Blvd Pump Station	\$21,027	\$9,988	\$11,039	
1212 FF Blvd Pump Station	\$27,627	\$13,123	\$14,504	
Sewer Lagoon Aerators	\$74,254	\$23,101	\$51,153	
Sewer Lagoon Baffles	\$14,195	\$4,022	\$10,173	
KB Village Pump Station Bypass	\$9,500	\$1,847	\$7,653	
Big Ocean Dunes Pump Station Bypass	\$9,500	\$1,636	\$7,864	
Beachwalk Pump Station Bypass	\$7,815	\$1,346	\$6,469	
Riggings Pump Station Bypass	\$7,815	\$1,346	\$6,469	
Little Ocean Dunes Pump Station Bypass	\$7,815	\$1,346	\$6,469	
Sewer Lagoon Baffles	\$34,170	\$6,265	\$27,905	
Snapper Lift Station Control Panel	\$8,763	\$657	\$8,106	
Little OD Lift Station Control Panel	\$8,835	\$663	\$8,172	
Big OD Lift Station Control Panel	\$8,867	\$665	\$8,202	
Riggings Lift Station Control Panel	\$8,924	\$669	\$8,255	
KB Village Lift Station Control Panel	\$15,508	\$646	\$14,862	
Sewer Flow Meter	\$34,607	\$0	\$34,607	
South 4th Sewer Pipe Relining	\$125,640	\$0	\$125,640	
Total Sewer Only Assets	\$1,571,345	\$320,172	\$1,251,173	
Infrastructure To Be Divided Equally Between Water & Sewer	\$8,268,755	\$4,369,510	\$3,899,245	
Allocation of Infrastructure:				
Water:				
Assets Shared With Sewer	\$4,134,378	\$2,184,755	\$1,949,623	
Total Water Only Assets	\$1,279,385	\$340,759	\$938,626	
Total Infrastructure - Water	\$5,413,763	\$2,525,514	\$2,888,249	
Sewer:				
Assets Shared With Water	\$4,134,378	\$2,184,755	\$1,949,623	
Total Sewer Only Assets	\$1,571,345	\$320,172	\$1,251,173	
Total Infrastructure - Sewer	\$5,705,723	\$2,504,927	\$3,200,796	

**TOWN OF KURE BEACH
ALLOCATION OF BUILDINGS AND LAND
CAPITAL ASSETS BETWEEN
WATER AND SEWER OPERATIONS**

EXHIBIT 2-C

	<u>ORIGINAL COST</u>	<u>ACCUMULATED DEPRECIATION AS OF 12/31/23</u>	<u>NET BOOK VALUE AS OF 12/31/23</u>	<u>COMMENTS</u>
Buildings	\$793,162	\$173,325	\$619,837	Total Water & Sewer Fund Buildings Capital Assets From 2023 Audited Financial Statements
Less Water Only Assets:	\$0	\$0	\$0	
Less Sewer Only Assets:	\$0	\$0	\$0	
Buildings To Be Divided Equally Between Water & Sewer	\$793,162	\$173,325	\$619,837	
Allocation of Buildings:				
Water:				
Assets Shared With Sewer	\$396,581	\$86,663	\$309,919	
Total Buildings - Water	\$396,581	\$86,663	\$309,919	
Sewer:				
Assets Shared With Water	\$396,581	\$86,663	\$309,919	
Total Buildings - Sewer	\$396,581	\$86,663	\$309,919	
Land	\$20,697	\$0	\$20,697	Total Water & Sewer Fund Land Capital Assets From 2023 Audited Financial Statements
Less Water Only Assets:	\$0	\$0	\$0	
Less Sewer Only Assets:	\$0	\$0	\$0	
Land To Be Divided Equally Between Water & Sewer	\$20,697	\$0	\$20,697	
Allocation of Land:				
Water:				
Assets Shared With Sewer	\$10,349	\$0	\$10,349	
Total Land - Water	\$10,349	\$0	\$10,349	
Sewer:				
Assets Shared With Water	\$10,349	\$0	\$10,349	
Total Land - Sewer	\$10,349	\$0	\$10,349	

**TOWN OF KURE BEACH
CALCULATION OF DEBT CREDIT
AS OF 12/31/2023**

EXHIBIT 3

<u>LOAN DESCRIPTION</u>	<u>WATER PORTION</u>	<u>SEWER PORTION</u>	<u>TOTAL OUTSTANDING BALANCE AT 12/31/23</u>
Sewer Rehabilitation Project	\$0	\$73,890	\$73,890
Kure Beach Pump Station #1	\$0	\$177,865	\$177,865
Town Hall (12%)	\$180,000	\$180,000	\$360,000
Town-Wide Water Meters	\$662,506	\$0	\$662,506
2023 Vacuum Truck	\$0	\$177,816	\$177,816
2019 & 2020 GMC Sierras	\$6,266	\$6,266	\$12,532
TOTAL	\$848,772	\$615,838	\$1,464,610

**TOWN OF KURE BEACH
CALCULATION OF GRANT CREDIT
AS OF 12/31/2023**

EXHIBIT 4

<u>FISCAL YEAR</u>	<u>ACCOUNT DESCRIPTION</u>	<u>ORIGINAL AMOUNT</u>	<u>% OF ORIGINAL ASSET COST DEPRECIATED AT 12/31/23</u>	<u>AMOUNT OF GRANT REMAINING</u>
2010	CWMTF Grants Sewer Rehab	\$268,717	28%	\$193,476
2011	CWMTF Grants Sewer Rehab	\$44,270	25%	\$33,203
	TOTAL	\$312,987		\$226,679