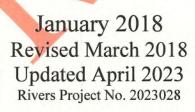


CITY OF NEW BERN NORTH CAROLINA

System Development Fee Evaluation





ENGINEERS

PLANNERS

SURVEYORS

LANDSCAPE ARCHITECTS



CITY OF NEW BERN NORTH CAROLINA

System Development Fee Evaluation

January 2018
Revised March 2018
Updated April 2023
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City of New Bern, North Carolina

System Development Fee Evaluation

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1.0 Executive Summary

The North Carolina General Assembly passed House Bill 436 in July 2017, amending Chapter 162A of the General Statutes by adding "Article 8, System Development Fees." This amendment was enacted as "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." As a requirement of the amended General Statute, the City of New Bern employed Rivers & Associates, Inc., a professional engineering consulting firm, to complete a system development fee analysis. The Statute specifies that a written analysis be performed to calculate a system development fee, based upon prescriptive criteria.

The initial analysis was completed in March 2018. The Statute also requires the analysis to be updated at least every five years. The City again employed Rivers & Associates, Inc. to complete an updated analysis.

The City of New Bern elected to re-evaluate utilizing the same "buy-in" method of the method alternatives to calculate their System Development Fee, similar to the original analysis. This method essentially recoups the costs of the existing facilities to serve new developments, with new development paying its proportionate share of the system value. The fee is calculated based upon the actual cost of non-depreciable and depreciable capital assets for each system less depreciation, less long-term debt and grant funds that was utilized to fund the capital projects. The value of grant funding has been adjusted to account for depreciation along with the assets.

The formula for calculation of the System Development Fee (SDF) is:

SDF = <u>Capital Asset Value – Depreciation – Debt Credit – Grants + Depreciated Grants</u>
Total System Capacity

By utilizing the above formula for each system, along with updated financial information for year ending June 2022, the resultant System Development Fees calculate to be:

Water System Fee \$28,106,411/5,500,000 GPD* = **\$5.11**/ GPD*

Sewer System Fee \$44,535,350/6,500,000 GPD* = \$6.85/ GPD*

* gallons per day

A Conversion Table is provided in Section 8.0 of this report to determine applicable specific flow rates for the development type, with general flow rates to apply provided in Appendix E.

2.0 Background

In 2016, the North Carolina Supreme Court ruled that municipalities did not have the authority under general law to assess "Water and Sewer Impact Fees" for developments seeking to connect to the municipality's infrastructure. These fees, as defined by some municipalities and counties, are often assessed for future infrastructure improvements such as water treatment and wastewater treatment capacity that may be required to serve new developments. This ruling was followed by the North Carolina General Assembly passing House Bill 436 in July 2017, amending Chapter 162A of the General Statutes by adding "Article 8, System Development Fees." This amendment was enacted as "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." A copy of HB436 is included with this analysis as Appendix A.

As a requirement of the amended General Statute, the City of New Bern employed Rivers & Associates, Inc., a professional engineering consulting firm, to complete a system development fee analysis. The Statute specifies that a written analysis be performed to calculate a system development fee, based upon prescriptive criteria. This analysis must then be posted and made available to the public for a period of not less than 45 days, soliciting comments on the analysis, and modifying or revising the analysis based on those comments. Following this period, the local government unit must hold a public hearing on the system development fee, prior to consideration for adoption by the unit. An additional stipulation requires that the analysis be updated at least every five years. This report provides the five-year update of the analysis.

3.0 <u>Description of the Analysis</u>

A System Development Fee, as defined in the statute, is "...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 developments, or a combination of those costs,...". 1

The System Development Fee may be derived utilizing one of several methods to establish the fee. These methods include the buy-in method, incremental or marginal cost method, or a combined cost method. The buy-in method essentially recoups the costs of the existing facilities to serve new developments, with new development paying its proportionate share of the system capacity. The incremental/ marginal cost method is utilized if the local government unit desires to recoup the cost of expanding the water or sewer system to serve a new development. The new development would pay its proportionate share of the expansion. The combined cost method utilizes a combination of the buy-in and incremental cost methods to derive the fee.

The City elected to recommend the "buy-in" method for the analysis in 2018, and elected updating the 2023 System Development Fee based on the same method. Although the method name might imply that

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the new development "purchases" a proportionate share of the water and sewer systems, no ownership of the systems by the new development is granted.

In addition to selecting a generally accepted accounting, engineering, and planning methodology for the analysis, the General Statute also requires:

- 1) Documenting the facts and data used in the analysis in reasonable detail for their reliability and sufficiency;
- 2) Demonstrating and documenting the reliable application of the methodology to the facts and data:
- Identifying the assumptions and limiting conditions of the analysis and demonstrating that these conditions do not materially undermine the reliability of the conclusions reached from the analysis;
- 4) Calculating a final system development fee per service unit of new development, including an equivalency or conversion table to determine fees applicable to various categories of demand;
- 5) Covering a planning period of not less than 10 years nor more than 20 years; and
- 6) Adoption by resolution or ordinance of the local government unit as outlined in GS 162A-209.¹

4.0 Methodology

Buy-In Method

The buy-in method utilizes the value of the existing system's capacity as a basis, and is generally utilized when the existing system has sufficient capacity to serve new development at present and in the future. In 2022, the City of New Bern utilized approximately 58% of its wastewater treatment capacity and 67% of its water production capacity on an average daily basis. If past trending continues, the plateau effect the City has seen through water conservation and addressing inflow and infiltration issues will continue into the foreseeable future. This will allow the City to maintain their current capacities near-term. In utilizing the buy-in methodology, new development pays its proportionate cost share of capacity in the existing system assets. This method meets the requirements outlined in GS 162A-205. The method is a well established method for accounting practices in the water and sewer industry, and well documented in AWWA's M1 Manual – Principles of Water Rates, Fees, and Charges (AWWA, 2017).² The basis for calculating the costs associated with previously completed capital improvements according the statute "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."³

The value of the cost of capital improvements (capital assets) can be readily determined utilizing capital asset information outlined in the City's Comprehensive Annual Financial Report (CAFR). Excerpts from the 2022 CAFR are included in Appendix B. This value is based upon the original cost less accumulated depreciation, as outlined in AWWA M1 (p.332).⁴ The values assigned in the CAFR are based upon generally accepted accounting principles and practices, in accordance with governmental accounting standards and the *Policy Manual for Local Governments in North Carolina* (Department of State Treasurer, 2014).⁵ The

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CAFR is independently audited each year by a third party accounting firm who completes an audit of the financial information in accordance with *Government Auditing Standards*. The purpose of this audit is to provide an opinion of the City's representation of financial information with respect to changes, fund reporting, etc.

The City uses the straight line method to depreciate their capital assets over the assets' useful life, at a uniform rate of depreciation per period. The estimated useful life for different assets is outlined in the "Notes to Financial Statements" in the City's CAFR, Note 1.N.⁶ The estimates for useful life are consistent with industry standards for water and sewer infrastructure. In accordance with standard accounting practices, land and construction in progress are considered as non-depreciable assets. Construction in progress does not meet the "litmus" test for the owner receiving the benefit of use and risk of ownership of the asset, and therefore are not depreciable.

The Governmental Accounting Standards Board (GASB) Statement No. 34 defines capital assets as "land, improvements to land, easements, buildings, building improvements, vehicles, machinery, equipment, …, infrastructure, and all other tangible or intangible assets that are used in operations and that have initial useful lives extending beyond a single reporting period."⁷ This definition is also presented in the Executive Summary of the North Carolina Department of the Treasurer's Policy Manual for Local Governments, Section 20, Capital Assets.⁸ The Policy Manual further states that the capital assets and the related depreciation expense should be recorded in the accounts of proprietary funds. The City's water and sewer funds are separately established as enterprise or proprietary funds in the CAFR and are considered business-type activities.

Although assets associated with the water and sewer systems, as defined above, include items such as equipment, vehicles and furniture and fixtures, the City has elected not to include these items in this capital asset calculation. The System Development Fee is calculated using non-depreciable and depreciable assets of land, buildings, treatment equipment and distribution/collection system components. These assets are the backbone of each system (water and sewer), assets necessary to provide capacity to customers. The system values are calculated as the value of the assets, less depreciation, less debt credits and less grant funds that may have been used to fund a particular capital asset project.

5.0 Water and Sewer System Values

Tables 1 and 2 below provide a summary of the net depreciated asset value for each enterprise fund utilizing information provided in Appendix C and D, respectively, for the water and sewer funds as of the fiscal year ending June 30, 2022:

Table 1. Water Fund:

Non-depreciable and Depreciable Capital Assets		\$63,267,055
Less Accumulated Depreciation		(\$21,689,009)
Less Accumulated Depreciation		(321,063,003)
Less Debt Credits, Grants, etc.		(\$13,482,640)
		444.222
Plus Grant Depreciation		\$11,005
N. 15 . 1. 14 . 17/1		420 425 444
Net Depreciated Asset Value	1	\$28,106,411

Table 2. Sewer Fund:

Non-depreciable and Depreciable Capital Assets		\$97,836,623
Less Accumulated Depreciation		(\$36,959,441)
Less Debt Credits, Grants, etc.		(\$18,936,269)
Plus Grant Depreciation	7	\$2,594,437
Net Depreciated Asset Value		\$44,535,350

The formula utilized to calculate the System Development Fee (SDF) is:

The values shown in the tables comprise the numerator of the above equation for each fund.

6.0 <u>Current Treatment Facilities and Capacity</u>

Water

Prior to enactment of the Central Coastal Plain Capacity Use Area Rule (CCPCUA) by the North Carolina Environmental Management Commission in 2001, all of the water for the City of New Bern was supplied from five (5) groundwater wells in the Cove City area, pulling water from the Black Creek Aquifer. These wells could provide as much as 9.0 MGD of water to the City for consumption. The raw water supply was pristine, requiring no treatment other than disinfection with chlorine prior to entering the distribution system. Although the City still utilizes this drinking water source and treatment process, the CCPCUA limited the amount of withdrawal from the aquifer allowed by the State. As a result, the City selected an

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alternate primary water supply source. The alternate source selected was raw water from the lower Castle Hayne Aquifer which required a conventional filtration and softening treatment plant to treat iron and manganese and reduce the hardness of the supply. Construction of the new 5.5 MGD water treatment plant was completed in May 2010, at a total project cost of \$33,606,624.00. Although the Cove City well field is still in use, the total reduction through the CCPCUA rule anticipated a reduction of available capacity to just over 1.0 MGD. The average daily water production in 2022 was 3.67 MGD.

The water distribution system consists of 348 miles of distribution and transmission mains, three ground storage tanks, six elevated storage tanks and three high service pumps.

<u>Sewer</u>

The original wastewater treatment plant was a single treatment train, trickling filter plant constructed in 1964. The original treatment capacity was 4.0 million gallons per day (MGD). A second treatment train was added in 1991 for an additional 0.7 MGD in capacity. The treatment process was changed in 2003 from the fixed film, trickling filter process to an activated sludge biological nutrient removal (BNR) process in order to meet more stringent environmental regulations for effluent characteristics and to comply with a Special Order by Consent (SOC). The construction of the new wastewater treatment plant increased the treatment capacity from 4.7 to 6.5 MGD (1.8 MGD increase), with a total project cost of \$23,644,079. The average daily flow from the treatment plant for calendar year 2022 was 3.78 MGD.

The sewer collection system consists of 440 miles of gravity collection sewer, pressure force mains, manholes and approximately 111 sewage pumping stations.

7.0 System Development Fee Calculation

The value of the water and sewer systems was calculated based upon the actual cost of capital assets for each system less depreciation, long-term debt and grant funds utilized to fund capital projects. As acceptable in good engineering judgment and generally accepted accounting practices, the value of grant funding has been depreciated along with the assets. Using the buy-in method, net depreciated asset value is divided by the total treatment capacity for water or sewer treatment for each respective fund. The previously shown formula for calculation of the System Development Fee (SDF) is presented as:

SDF = <u>Net Depreciated Asset Value</u> Total System Capacity

By utilizing the above formula for each system, the resultant updated System Development Fees calculate to be:

Water System Fee \$28,106,411/5,500,000 GPD* = **\$5.11**/ GPD*

Sewer System Fee \$44,535,350/6,500,000 GPD* = **\$6.85**/ GPD*

* gallons per day

8.0 Conversion Table

Flow rates for water and sewer shall be determined in accordance with flow rates established in Chapter 15A of the North Carolina Administrative Code, Subchapter 2T .0114(b) and (c), included as Appendix E except for the following previously established by the City of New Bern:

Description	Quantity
General Commercial Buildings	Lesser of 100 GPD per 1,000 SQ. FT. of floor space or 100 GPD per
	fixture
Restaurants	300 GPD per 1,000 SQ. FT. of floor space
Residential	85 GPD per Bedroom
Hotels, Motels, Bed & Breakfasts	65 GPD per Bedroom
Convalescent, Nursing, and Rest	65 GPD per Bedroom
Homes	65 GPD per Beardonn

Definitions:

General Commercial Buildings shall be defined as follows:

- General business and office facilities
- Churches, with or without kitchens, day care or camps
- Shopping centers and malls with food service
- Stores and shopping centers without food service
- Medical, dental, or veterinary offices
- Barber and beauty shops
- Schools, preschools, or daycares
- Service stations or gas stations

<u>Restaurant</u> shall be defined as follows:

- Banquet, dining halls
- Bars, cocktail lounges
- Caterers
- Restaurant, full service
- Deli
- Bakery
- Butcher shop
- Fish market

9.0 <u>REFERENCES</u>

- ¹ General Assembly of North Carolina Session 2017; Session Law 2017-138; House Bill 436; (Pg. 2, 3) §162A-205. Supporting analysis; 2), 4), 5), 6), 7), 8).
- ² American Water Works Association, 7th Edition 2017; M1 Manual; Chapter VII.2, System Development Charges; APPROACHES TO CALCULATING SDCs; Basic Approaches; pp. 329-330; 1., 2., 3.
- ³ General Assembly of North Carolina Session 2017; Session Law 2017-138; House Bill 436, (Pg 3) §162A-211. Use and administration of revenue; (b).
- ⁴ American Water Works Association, 7th Edition 2017; M1 Manual; Chapter VII.2, System Development Charges; EXAMPLES OF SDC METHODOLOGIES; Buy-in Method; p. 332; 2.
- ⁵ North Carolina Department of State Treasurer; Policy Manual for Local Governments; Section 20: Capital Assets; Revision Issues: August 2014
- ⁶ City of New Bern, North Carolina; Comprehensive Annual Financial Report; Year End June 30, 2022; NOTES TO FINANCIAL STATEMENTS; NOTE 1.N; p. 28.
- ⁷ North Carolina Department of State Treasurer; Policy Manual for Local Governments; Section 20: Capital Assets; Revision Issues: August 2014; p. 1.
- ⁸ North Carolina Department of State Treasurer; Policy Manual for Local Governments; Section 20: Capital Assets; Revision Issues: August 2014; Part V Depreciation and Amortization; pp. 29-30.



APPENDIX A

NC House Bill 436

GENERAL ASSEMBLY OF NORTH CAROLINA SESSION 2017

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.

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.
- 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.

"<u>§ 162A-202.</u> 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.

"<u>§ 162A-204.</u> 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:

- 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.
- 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) <u>Identifies all assumptions and limiting conditions affecting the analysis and demonstrates that they do not materially undermine the reliability of conclusions reached.</u>
- (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) <u>Is adopted by resolution or ordinance of the local governmental unit in accordance with</u> G.S. 162A-209.

"<u>§ 162A-206.</u> 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) <u>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.</u>

"<u>§ 162A-208.</u> Reserved.

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

- (a) For not less than 45 days prior to considering the adoption of a system development fee analysis, the local governmental unit shall post the analysis on its Web site and solicit and furnish a means to submit written comments, which shall be considered by the preparer of the analysis for possible modifications or revisions.
- (b) After expiration of the period for posting, the governing body of the local governmental unit shall conduct a public hearing prior to considering adoption of the analysis with any modifications or revisions.
- (c) The local governmental unit shall publish the system development fee in its annual budget or rate plan or ordinance. The local governmental unit shall update the system development fee analysis at least every five years.

"<u>§ 162A-210.</u> 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.
 - <u>c.</u> <u>Land acquisition cost.</u>
 - 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.

"<u>§ 162A-212.</u> 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.

"<u>§ 162A-214.</u> 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 <u>or to be furnished</u> by a public enterprise. Schedules of rents, rates, fees, charges, and penalties may vary for the same class of service in different areas of the county and may vary according to classes of service, and different schedules may be adopted for services provided outside of the county. A county may include a fee relating to subsurface discharge wastewater management systems and services on the property tax bill for the real property where the system for which the fee is imposed is located.
- (a2) A county may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes.

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

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

- (a) A city may establish and revise from time to time schedules of rents, rates, fees, charges, and penalties for the use of or the services furnished or to be furnished by any public enterprise. Schedules of rents, rates, fees, charges, and penalties may vary according to classes of service, and different schedules may be adopted for services provided outside the corporate limits of the city.
- (e) A city may require system development fees only in accordance with Article 8 of Chapter 162A of the General Statutes."

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

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

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

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

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

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

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

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

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

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

- (a) The district board may fix, and may revise from time to time, rents, rates, fees and other charges for the use of land for the services furnished or to be furnished by any water system or sewerage system or both. Such rents, rates, fees and charges shall not be subject to supervision or regulation by any bureau, board, commission, or other agency of the State or of any political subdivision. Any such rents, rates, fees and charges pledged to the payment of revenue bonds of the district shall be fixed and revised so that the revenues of the water system or sewerage system or both, together with any other available funds, shall be sufficient at all times to pay the cost of maintaining, repairing and operating the water system or the sewerage system or both, the revenues of which are pledged to the payment of such revenue bonds, including reserves for such purposes, and to pay the interest on and the principal of such revenue bonds as the same shall become due and payable and to provide reserves therefor. If any such rents, rates, fees and charges are pledged to the payment of any general obligation bonds issued under this Article, such rents, rates, fees and charges shall be fixed and revised so as to comply with the requirements of such pledge. The district board may provide methods for collection of such rents, rates, fees and charges and measures for enforcement of collection thereof, including penalties and the denial or discontinuance of service.
- (b) The district board may require system development fees only in accordance with Article 8 of this Chapter."

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

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

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

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

- (a) The district board may fix, and may revise from time to time, rents, rates, fees and other charges for the use of and for the services furnished or to be furnished by any sewerage system. Such rents, rates, fees and charges shall not be subject to supervision or regulation by any bureau, board, commission, or other agency of the State or of any political subdivision. Any such rents, rates, fees and charges pledged to the payment of revenue bonds of the district shall be fixed and revised so that the revenues of the sewerage system, together with any other available funds, shall be sufficient at all times to pay the cost of maintaining, repairing and operating the sewerage system the revenues of which are pledged to the payment of such revenue bonds, including reserves for such purposes, and to pay the interest on and the principal of such revenue bonds as the same shall become due and payable and to provide reserves therefor. If any such rents, rates, fees and charges are pledged to the payment of any general obligation bonds issued under this Article, such rents, rates, fees and charges shall be fixed and revised so as to comply with the requirements of such pledge. The district board may provide methods for collection of such rents, rates, fees and charges and measures for enforcement of collection thereof, including penalties and the denial or discontinuance of service.
- (b) The district board may require system development fees only in accordance with Article 8 of this Chapter."

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

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

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

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

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

and collect rates, fees or other charges and penalties for the use of or the services furnished or to be furnished by any sanitary sewer system, water system or sanitary sewer and water system of the district; and may exercise those powers conferred on them by this Article.

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

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

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

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

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

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

- s/ Daniel J. Forest President of the Senate
- s/ Tim Moore Speaker of the House of Representatives
- s/ Roy Cooper Governor

Approved 4:13 p.m. this 20th day of July, 2017

APPENDIX B

Excerpts from CAFR 2022

CITY OF ACH BERA Porth Carolina



ANNUAL COMPREHENSIVE FINANCIAL REPORT

For the Year Ended June 30, 2022

Prepared by: City of New Bern Finance Department

> Submitted by: Kimberly A. Ostrom Director of Finance

K. Interfund Receivables and Payables

Activity between funds that is representative of lending/borrowing arrangements outstanding at the end of the fiscal year as well as all other outstanding balances between funds are reported as "due to/from other funds." Any residual balances outstanding between the governmental activities and business-type activities are reported in the government wide financial statements as "internal balances."

L. Inventories

All inventories are valued at average cost using the first-in/first-out (FIFO) method. Inventories of governmental funds are recorded as expenditures when consumed rather than when purchased. Inventories of the enterprise funds are recorded as expenses when consumed rather than when purchased.

M. Prepaid Items

Payments made to vendors for services that will benefit periods beyond June 30, 2022, are recorded as prepaid items in both government-wide and fund financial statements. The City made a deposit on a fire truck that is classified as prepaid expenses.

N. Capital Assets

Capital assets, which include property, plant, equipment, infrastructure assets (e.g. roads, bridges, sidewalks, and similar items), and intangible assets are reported in the applicable governmental or business-type activities column in the government-wide financial statements. Capital assets are defined by the City as assets with an initial estimated useful life in excess of two years and individual cost capitalization thresholds as follows: land of more than \$1, infrastructure of more than \$100,000; building and land improvements of greater than \$25,000; and equipment of more than \$5,000. Such assets are recorded at historical cost or estimated historical cost if purchased or constructed. Donated capital assets received prior to June 30, 2015 are recorded at their estimated fair value at the date of donation. Donated capital assets received after June 30, 2015 are recorded at acquisition value. The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend asset lives are not capitalized.

Capital assets are depreciated using the straight-line method over the following useful lives to cost of the assets:

Buildings	25-60 years
Improvements	20-50 years
Infrastructure	30-50 years
Plants and distribution systems	30-50 years
Vehicles and service equipment	3-10 years
Furniture and equipment	5-10 years

O. Right to Use Assets

The City has recorded right to use lease assets as a result of implementing GASB 87. The right to use assets are initially measured at an amount equal to the initial measurement of the related lease liability plus any lease payments made prior to the lease term, less lease incentives, and plus ancillary charges necessary to place the lease into service. The right to use assets are amortized on a straight-line basis over the life of the related lease.

Water Fund		Beginning Balances		Increases		Decreases		Transfers		Ending Balances
Capital assets not being depr			•				_			
Land	\$	852,479	\$	201.042	\$	(27(225)	\$	-	\$	852,479
Construction in progress Total capital assets not being	_	776,924	_	201,243		(376,395)		-		601,772
depreciated		1,629,403		201,243		(376,395)		_		1,454,251
Capital assets being deprecia	ted:									
Buildings		35,655,357		12,997		_		(220,756)		35,447,598
Equipment		5,469,347		31,366		(1,970)		695,169		6,193,912
Furniture and fixtures		7,731		-		(3,843)		-		3,888
Distribution systems		26,475,622		363,997		(-,)		(474,413)		26,365,206
Vehicles		1,023,219		130,849		_		(26,759)		1,127,309
Total capital assets being								(=0,705)		1,127,505
depreciated		68,631,276		539,209		(5,813)		(26,759)		69,137,913
Less accumulated depreciation	n for							(,)		
Buildings	1101	(8,890,834)		(965,630)				132,505		(9,723,959)
Equipment		(1,795,494)		(102,936)		1,970		(379,821)		(9,723,939) (2,276,281)
Furniture and fixtures		(7,731)		(102,950)		3,843		(379,621)		
Distribution systems		(11,646,082)		(566,284)		3,643		247,316		(3,888)
Vehicles		(876,540)		(70,040)		-		26,759		(11,965,050)
Total accumulated depreciation		(23,216,681)	\$	(1,704,890)	\$	5,813	\$	26,759	_	(919,821) (24,888,999)
Total capital assets being		(23,210,001)	<u></u>	(1,701,050)	Ψ	5,615	Ψ	20,737	_	(24,000,999)
depreciated, net		45,414,595								44,248,914
Water Fund capital assets, net	\$	47,043,998						-	\$	45,703,165
,	_	Beginning							Ψ	Ending
Sewer Fund		Balances		Increases		Decreases		Transfers		Balances
Capital assets not being depre	ciate					200100000				Datanees
Land	\$	12,389,511	\$	14,469	\$	_	\$	_	\$	12,403,980
Construction in progress		1,773,287		439,786		(1,194,821)	4	_	Ψ	1,018,252
Total capital assets not being						(-,-> ,,==1)				1,010,202
depreciated		14,162,798		454,255		(1,194,821)		-		13,422,232
Capital assets being depreciat	ed:									
Buildings	·cu.	40,575,063		556,098		0.00				41,131,161
Equipment		4,153,582		342,083		(35,223)		-		4,460,442
Furniture and fixtures		89,039		542,005		(12,824)				76,215
Distribution systems		42,393,208		890,022		(12,024)				43,283,230
Vehicles		2,045,562		495,587		(153,993)		(22,777)		2,364,379
Total capital assets being		2,010,002		193,307	_	(155,555)	_	(22,111)	_	2,304,379
depreciated		89,256,454		2,283,790		(202,040)		(22,777)		91,315,427
Less accumulated depreciation	n for:									
Buildings		(21,922,681)		(1,115,157)		-		-		(23,037,838)
Equipment		(3,017,684)		(219,123)		34,531		-		(3,202,276)
Furniture and fixtures		(78,725)		(8,250)		12,824		-		(74,151)
Distribution systems		(13,061,627)		(859,976)		-				(13,921,603)
Vehicles		(1,664,196)		(128,931)		153,993		22,777		(1,616,357)
Total accumulated depreciation		(39,744,913)	\$	(2,331,437)	\$	201,348	\$	22,777		(41,852,225)
Total capital assets being depreciated, net		49,511,541						_		49,463,202
Sewer Fund capital assets, net	\$	63,674,339						_	\$	62,885,434

In the event of default the entire outstanding principal and interest is immediately payable, and the bank may proceed with additional options as legally allowed.

Future minimum payments as of June 30, 2022 for the installment purchase contracts are as follows:

For the	Governmental Activities				Business-Ty	pe A	ctivities	
Year Ending June 30		Principal		Interest		Principal		Interest
2023	\$	1,854,254	\$	215,254	\$	465,364	\$	24,850
2024		1,475,589		166,739		333,210		14,406
2025		1,123,531		134,256		186,377		7,339
2026		1,131,690		108,689		186,377		3,145
2027		890,156		82,991		-		-
2028-2032		2,133,341		163,261		-		-
2033-2037		507,333		137,934		-		-
Total	\$	9,115,894	\$	1,009,124	\$	1,171,328	\$	49,740

c. Notes Payable

The City has various note payable agreements with the State outstanding for water and sewer distribution expansion and improvement projects. In the event of a default the entire outstanding principal and interest are immediately payable, additional action may be taken as legally allowed. The outstanding balances for the notes as of June 30, 2022 are as follows:

Business-Type activities:	nlance as of ne 30, 2022
A direct borrowing note issued by North Carolina Department of Environment and Natural Resources for \$20,110,036 was issued in February 2003 with variable semi-annual payments for a wastewater treatment plant expansion. The note bears an interest rate of 2.57% and matures in 2023.	\$ 1,265,017
A direct borrowing note issued by North Carolina Department of Environment and Natural Resources for \$1,351,452 was issued in March 2003 with variable semi-annual payments for wastewater treatment plant expansion. The note bears an interest rate of 2.66% and matures in 2024.	135,145
A direct borrowing note issued by North Carolina Department of Environment and Natural Resources for \$33,606,624 was issued in July 2010 with variable semi-annual payments of \$1,680,331 for water treatment plant expansion. The note bears an interest rate of 2.27% and matures in 2030.	 13,442,650
Total outstanding notes payable:	\$ 14,842,812

The debt service to maturity on the notes payable is as follows:

Year Ending June 30,	Principal	Interest	Total
2023	\$ 3,012,921	\$ 340,582	\$ 3,353,503
2024	1,747,904	268,214	2,016,118
2025	1,680,331	228,357	1,908,688
2026	1,680,331	190,298	1,870,629
2027	1,680,331	152,238	1,832,569
2028-2032	5,040,994	228,357	5,269,351
Total:	\$ 14,842,812	\$ 1,408,046	\$ 16,250,858

APPENDIX C

Water Fund Asset, Depreciation, Debt Credit and Grant Summary
with Asset Audit

Water Asset Valuation

Non-depreciable Capital Assets		
	Land	852,479.00
	Construction in Progress	601,772.00
	Subtotal	1,454,251.00
Depreciable Assets		
	Buildings, Treatment Equipment	35,447,598.00
	Distribution Systems	26,365,206.00
	Subtotal	61,812,804.00
		62 267 277 22
	Total Asset Valuation	63,267,055.00
Less Accumulated Depreciation		
	Buildings, Treatment Equipment	(9,723,959.00)
	Distribution Systems	(11,965,050.00)
	Subtotal	(21,689,009.00)
Less Debt Credits, Grants, etc		
	Debt for Water Plant Expansion	(13,442,650.00)
	Water Treatment Project Grant	(39,990.00)
	Subtotal	(13,482,640.00)
	Total Asset Deductions	(35,171,649.00)
	Water Treatment Project Grant	
Plus Depreciated Grants	Depreciation	11,005.08
	Net Depreciated Asset Value	28,106,411.08

APPENDIX D

Sewer Fund Asset, Depreciation, Debt Credit and Grant Summary
with Asset Audit

Sewer Asset Valuation

Non-depreciable Capital Assets		
	Land	12,403,980
	Construction in Progress	1,018,252
	Subtotal	13,422,232
Depreciable Assets		
	Buildings, Treatment Equipment	41,131,161
	Distribution Systems	43,283,230
	Subtotal	84,414,391
	Total Asset Valuation	97,836,623
Less Accumulated Depreciation		
	Buildings, Treatment Equipment	(23,037,838)
	Distribution Systems	(13,921,603)
	Subtotal	(36,959,441)
Less Debt Credits, Grants, etc		
	February 2003 WWTP Debt	(1,265,017)
	March 2003 WWTP Debt	(135,145)
	Trent Woods Sewer Construction	(8,105,483)
	Wastewater Improvements (Quarry	
	Project) Grant	(8,930,624)
	Waste Treatment Plant Upgrade	
	Grant	(500,000)
	Subtotal	(18,936,269)
	Total Asset Deductions	(55,895,710)
Plus Depreciated Grants	Trent Woods Sewer Construction	2,269,535
	Wastewater Improvements (Quarry	
	Project) Grant	99,776
	Waste Treatment Plant Upgrade	
	Grant	225,125
	Subtotal	2,594,437
	Net Depreciated Asset Value	44,535,350

APPENDIX E

Flow Rate Determination, 15A NC AC Subchapter 2T .0114

15A NCAC 02T .0114 WASTEWATER DESIGN FLOW RATES

Veterinary offices (not including boarding)

- (a) This Rule shall be used to determine wastewater flow rates for all systems governed by this Subchapter unless alternate criteria are provided by a program-specific rule or for flow used for the purposes of 15A NCAC 02H .0105. Higher flow rates shall be required where usage and occupancy are atypical, including those in Paragraph (e) of this Rule. Wastewater flow calculations shall take hours of operation and anticipated maximum occupancies and usage into account when calculating peak flows for design.
- (b) In determining the volume of sewage from dwelling units, the flow rate shall be 120 gallons per day per bedroom. The minimum volume of sewage from each dwelling unit shall be 240 gallons per day and each additional bedroom above two bedrooms shall increase the volume by 120 gallons per day. Each bedroom or any other room or addition that can function as a bedroom shall be considered a bedroom for design purposes. When the occupancy of a dwelling unit exceeds two persons per bedroom, the volume of sewage shall be determined by the maximum occupancy at a rate of 60 gallons per person per day.
- (c) The following table shall be used to determine the minimum allowable design daily flow of wastewater facilities. Design flow rates for establishments not identified below shall be determined using available flow data, water-using fixtures, occupancy or operation patterns, and other measured data.

Type of Establishments	Daily Flow For Design
Barber and beauty shops	
Barber Shops	50 gal/chair
Beauty Shops	125 gal/booth or bowl
Businesses, offices and factories	- G
General business and office facilities	25 gal/employee/shift
Factories, excluding industrial waste	25 gal/employee/shift
Factories or businesses with showers or food preparation	35 gal/employee/shift
Warehouse	100 gal/loading bay
Warehouse – self storage (not including caretaker residence)	1 gal/unit
Churches	<u>C</u>
Churches without kitchens, day care or camps	3 gal/seat
Churches with kitchen	5 gal/seat
Churches providing day care or camps	25 gal/person (child & employee)
Fire, rescue and emergency response facilities	
Fire or rescue stations without on site staff	25 gal/person
Fire or rescue stations with on-site staff	50 gal/person/shift
Food and drink facilities	
Banquet, dining hall	30 gal/seat
Bars, cocktail lounges	20 gal/seat
Caterers	50 gal/100 sq ft floor space
Restaurant, full Service	40 gal/seat
Restaurant, single service articles	20 gal/seat
Restaurant, drive-in	50 gal/car space
Restaurant, carry out only	50 gal/100 sq ft floor space
Institutions, dining halls	5 gal/meal
Deli	40 gal/100 sq ft floor space
Bakery	10 gal/100 sq ft floor space
Meat department, butcher shop or fish market	75 gal/100 sq ft floor space
Specialty food stand or kiosk	50 gal/100 sq ft floor space
Hotels and Motels	
Hotels, motels and bed & breakfast facilities,	
without in-room cooking facilities	120 gal/room
Hotels and motels, with in-room cooking facilities	175 gal/room
Resort hotels	200 gal/room
Cottages, cabins	200 gal/unit
Self service laundry facilities	500 gal/machine
Medical, dental, veterinary facilities	
Medical or dental offices	250 gal/practitioner/shift

250 gal/practitioner/shift

20 gal/pen, cage, kennel or stall Veterinary hospitals, kennels, animal boarding facilities Hospitals, medical 300 gal/bed 150 gal/bed Hospitals, mental Convalescent, nursing, rest homes without laundry facilities 60 gal/bed Convalescent, nursing, rest homes with laundry facilities 120 gal/bed Residential care facilities 60 gal/person Parks, recreation, camp grounds, R-V parks and other outdoor activity facilities Campgrounds with comfort station, without water or sewer hookups 75 gal/campsite 100 gal/campsite Campgrounds with water and sewer hookups 50 gal/space Campground dump station facility 60 gal/person Construction, hunting or work camps with flush toilets Construction, hunting or work camps with chemical or portable toilets 40 gal/person Parks with restroom facilities 250 gal/plumbing fixture 30 gal/person Summer camps without food preparation or laundry facilities Summer camps with food preparation and laundry facilities 60 gal/person Swimming pools, bathhouses and spas 10 gal/person Public access restrooms 325 gal/plumbing fixture Schools, preschools and day care Day care and preschool facilities 25 gal/person (child & employee) Schools with cafeteria, gym and showers 15 gal/student Schools with cafeteria 12 gal/student Schools without cafeteria, gym or showers 10 gal/student 60 gal/person (student & employee) Boarding schools Service stations, car wash facilities Service stations, gas stations 250 gal/plumbing fixture 1200 gal/bay Car wash facilities Sports centers Bowling center 50 gal/lane Fitness, exercise, karate or dance center 50 gal/100 sq ft 50 gal/court Tennis, racquet ball Gymnasium 50 gal/100 sq ft Golf course with only minimal food service 250 gal/plumbing fixture Country clubs 60 gal/member or patron Mini golf, putt-putt 250 gal/plumbing fixture Go-kart, motocross 250 gal/plumbing fixture Batting cages, driving ranges 250 gal/plumbing fixture Marinas without bathhouse 10 gal/slip 30 gal/slip Marinas with bathhouse Video game arcades, pool halls 250 gal/plumbing fixture Stadiums, auditoriums, theaters, community centers 5 gal/seat Stores, shopping centers, malls and flea markets Auto, boat, recreational vehicle dealerships/showrooms with restrooms 125 gal/plumbing fixture Convenience stores, with food preparation 60 gal/100 sq ft Convenience stores, without food preparation 250 gal/plumbing fixture Flea markets 30 gal/stall

(d) Design daily flow rates for proposed non-residential developments where the types of use and occupancy are not known shall be designed for a minimum of 880 gallons per acre, or the applicant shall specify an anticipated flow based upon anticipated or potential uses.

130 gal/1000 sq ft

100 gal/1000 sq ft

5 gal/passenger

Shopping centers and malls with food service

Stores and shopping centers without food service

Transportation terminals – air, bus, train, ferry, port and dock

- (e) Design daily flow rates for residential property on barrier islands and similar communities located south or east of the Atlantic Intracoastal Waterway and used as vacation rental as defined in G.S. 42A-4 shall be 120 gallons per day per habitable room. Habitable room shall mean a room or enclosed floor space used or intended to be used for living or sleeping, excluding kitchens and dining areas, bathrooms, shower rooms, water closet compartments, laundries, pantries, foyers, connecting corridors, closets, and storage spaces.
- (f) An adjusted daily sewage flow design rate shall be granted for permitted but not yet tributary connections and future connections tributary to the system upon showing that the capacity of a sewage system is adequate to meet actual daily wastewater flows from a facility included in Paragraph (b) or (c) of this Rule without causing flow violations at the receiving wastewater treatment plant or capacity-related sanitary sewer overflows within the collection system as follows:
 - (1) Documented, representative data from that facility or a comparable facility shall be submitted by an authorized signing official in accordance with Rule .0106 of this Section to the Division for all flow reduction requests, as follows:
 - (A) dates of flow meter calibrations during the time frame evaluated and indication if any adjustments were necessary;
 - (B) a breakdown of the type of connections (e.g. two bedroom units, three bedroom units) and number of customers for each month of submitted data as applicable. Identification of any non-residential connections including subdivision clubhouses and pools, restaurants, schools, churches and businesses. For each non-residential connection, information identified in Paragraph (c) of this Rule (e.g. 200 seat church, 40 seat restaurant, 35 person pool bathhouse);
 - (C) a letter of agreement from the owner or an official, meeting the criteria of Rule .0106 of this Section, of the receiving collection system or treatment works accepting the wastewater and agreeing with the adjusted design rate;
 - (D) age of the collection system;
 - (E) analysis of inflow and infiltration within the collection system or receiving treatment plant, as applicable;
 - (F) if a dedicated wastewater treatment plant serves the specific area and is representative of the residential wastewater usage, at least the 12 most recent consecutive monthly average wastewater flow readings and the daily total wastewater flow readings for the highest average wastewater flow month per customers, as reported to the Division;
 - (G) if daily data from a wastewater treatment plant cannot be used or is not representative of the project area: 12 months worth of monthly average wastewater flows from the receiving treatment plant shall be evaluated to determine the peak sewage month. Daily wastewater flows shall then be taken from a flow meter installed at the most downstream point of the collection area for the peak month selected that is representative of the project area. Justification for the selected placement of the flow meter shall also be provided; and
 - (H) an estimated design daily sewage flow rate shall be determined by calculating the numerical average of the top three daily readings for the highest average flow month. The calculations shall also account for seasonal variations, excessive inflow and infiltration, age and suspected meter reading and recording errors.
 - (2) The Division shall evaluate all data submitted but shall also consider other factors in granting, with or without adjustment, or denying a flow reduction request including: applicable weather conditions during the data period (i.e. rainy or drought), other historical monitoring data for the particular facility or other similar facilities available to the Division, the general accuracy of monitoring reports and flow meter readings, and facility usage, such as whether the facility is in a resort area.
 - (3) Flow increases shall be required if the calculations required by Subparagraph (f)(1) of this Rule yield design flows higher than that specified in Paragraphs (b) or (c) of this Rule.
 - (4) The permittee shall retain the letter of any approved adjusted daily design flow rate for the life of the facility and shall transfer such letter to a future permittee.

History Note: Authority G.S. 143-215.1; 143-215.3(a)(1); Eff. September 1, 2006; Readopted Eff. September 1, 2018.

APPENDIX F

Capital Asset Grant Depreciation by Fund

Fund	Project	Grant/Reim Amount		
4513	Trent Woods Sewer Construction	8,105,483	S0320	
4511	Wastewater Improvement	8,930,624		*
4512	Wastewater Treatment Plant Upgrade	500,000	S0274	
		17,536,107		

Total Assets Value	Grant Proceeds as a % of Asset	Total Accum Depr on Asset	Accum Depr on Grant by %		Accum Depr on Grant by Useful Life
11,131,589	72.82%	3,116,845	2,269,535		2,269,535
10,651,296	83.85%	119,000	99,776		99,776
20,631,581	2.42%	9,289,387	225,125		225,125
				Total	2,594,437

*Fund 4511					
	Asset	Accum Depr			
S0270	6,546,675	-	61.46%	5,489,087	
8-244-4000	2,625,961	-	24.65%	2,201,748	
S0556	30,000	-	0.28%	25,154	
S0262	119,000	119,000	1.12%	99,776	
S0612	422,470	-	3.97%	354,222	
8-242-096	907,191	-	8.52%	760,638	83.85%
	10,651,296	119,000	100.00%	8,930,624	

Fund	Project	Grant/Reim Amount	
4313 Wat	er Treatment Project	39,990	W102

		Grant Proceeds as a	Total Accum Depr	Accum Depr on	Accum Depr on Grant
unt	Total Assets Value	% of Asset	on Asset	Grant by %	by Useful Life
.990 W1028	33,000,750	0.12%	9,081,668	11,005	11,005