

BUFFALO SEWER AUTHORITY

**Report on Fiscal Year 2021-22 Rates and
Charges for Sewer Services**

January 13, 2022

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Buffalo Sewer Authority
1038 City Hall
Buffalo, NY 14202

To the Board Members of the Buffalo Sewer Authority:

I am pleased to submit my report on the adequacy of Fiscal Year July 1, 2021 – June 30, 2022 (Fiscal Year 2021-22) rates and charges for sewer service in the City of Buffalo. The report presents background information regarding the Sewer System and the anticipated cash receipts and disbursements of the Sewer System for the Fiscal Year 2021-22 as well as a mid-year analysis of actual cash receipts and disbursements through November 30, 2021 and as projected through Fiscal Year 2021-22 year end.

There will usually be differences between budgeted and actual results because events and circumstances frequently do not occur as expected and those differences may be material. I have no responsibility to update this report for events and circumstances occurring after the date of this report.

I appreciate the opportunity to be of service to the Sewer Authority and would be pleased to answer any questions you may have regarding the rate study methodology or findings.

Lisa A Foti

Lisa A. Foti, CPA
Rate Consultant

Buffalo, New York
January 13, 2022

SECTION I – INTRODUCTION

A. Overview of the Fiscal Year 2021-22 Rates

This report presents the rate findings for the City of Buffalo Sewer System. The Report presents findings regarding the Fiscal Year 2021-22 revenue requirements of the Sewer System and the adequacy of budgeted sewer rates and charges.

The report is structured in four sections:

- I. Introduction
- II. Revenue Requirements of the Sewer System
- III. Sewer Rates and Revenues
- IV. Conclusions

Section I of the Report provides background information regarding the Sewer System, as well as an outline of the responsibilities of the Buffalo Sewer Authority (Authority) and City of Buffalo (City). This Section also summarizes several potential rate-setting objectives for consideration by the Authority and reviews the methodology, which was used in preparing the Report.

B. The Buffalo Sewer System

The Buffalo Sewer Authority, a public benefit corporation, was created by an Act of the Legislature in 1935. The Authority was given the responsibility for providing an effective means of relieving the Niagara River from pollution by sewage and waste. Operation of the sewage treatment plant serving the City of Buffalo began by the Buffalo Sewer Authority on July 1, 1938. The Bird Island Sewage Treatment Plant receives sewage from approximately 840 miles of sewer and clarifies, deodorizes and disinfects it. The effluent finally discharged into the Niagara River meets all Federal and State water quality standards. Solids removed from the sewage in its passage through the plant are disposed of by incineration. The City's wastewater generally includes liquids and waterborne solids from domestic, industrial or commercial uses, as well as other water that has been used, whose quality has been degraded, and discharged to the sewage system.

C. The Roles of the Authority and the City

The Authority establishes rates and charges for sewer service and related services to provide sufficient revenue to pay the operating expenses of the system and for debt service (principal and interest) on the Authority's bonds. The Authority is responsible for financing capital improvements to the Sewer System of the City of Buffalo. The Authority also issues revenue bonds, the proceeds of which are used to pay for capital improvements to the Sewer System. The previously issued bonds and future bonds of the Authority are backed by revenues of the

Sewer System. The City has granted the Authority the right to use the agents, employees, records and equipment of the Division of Water, the Division of Treasury, Department of Audit and Control, Department of Assessment and Department of Law. The City of Buffalo charges the Authority for services rendered by City departments.

D. Rate Setting Considerations

In evaluating the rates and charges for sewer service in the City of Buffalo, there are a number of potential objectives, which should be considered by the Sewer Authority:

- Sufficient cash receipts must be raised by rates and charges and other sources of revenues to satisfy the revenue requirements of the Sewer System;
- Rates and charges should be equitable and fair, in the sense that charges levied on different users reflect the associated costs incurred as a result of serving those users;
- The rate structure should provide a reasonably stable and predictable flow of revenue;
- The rate structure should be relatively simple and inexpensive to administer; and
- The rate structure should be understandable to the customer.

On January 31, 2020, the United States Secretary of Health and Human Services (HHS) declared a public health emergency related to the global spread of coronavirus COVID-19, and a pandemic was declared by the World Health Organization in February 2020. The COVID-19 pandemic reduced the Authority's cash receipts by 7% and 8.5% in Fiscal Year 19-20 and Fiscal Year 20-21, respectively. As part of the American Rescue Plan Act (ARPA and Act), the City of Buffalo was awarded \$330M in Federal government support. The Mayor, in collaboration with various stakeholders put forth a spending plan in accordance with Act provisions that was unanimously approved by the Common Council on August 26, 2021. The plan includes \$13M to be used for a Water and Sewer Debt Forgiveness Program. This program will address water affordability by providing financial assistance to certain low-income customers who have experienced financial hardship as a result of the ongoing pandemic and have become delinquent in their water and sewer accounts. This assistance will enable the forgiveness of outstanding and delinquent water and sewer accounts. The plan also provides for \$40M in Smart Sewer and Water Infrastructure projects to improve the efficiency, quality and service of the water and sewer systems throughout the City of Buffalo. This report assumes amounts will be allocated evenly between Water and Sewer projects and the funds are being considered as part of the Fiscal Year 2021-22 cash receipts. Section III of this report addresses the cash receipts for Fiscal Year 20-21 and projects through Fiscal Year 21-22 based on the trends that the Authority has experienced through November 2021.

E. Fiscal Year 2021-22 Rate Methodology and Report Structure

The Fiscal Year 2021-22 Rate analysis has two principal components:

- A determination of the budgeted cash requirements for the Sewer System in Fiscal Year 2021-22; and
- An analysis of the approved budgeted rates and charges and the anticipated annual budgeted cash receipts of the System.

Section II of the Report illustrates the cash requirements and hence revenue required from the Sewer System in Fiscal Year 2021-22. Section III summarizes the customer base, the expected cash receipts from other sources and the amounts to be raised from user charges. The conclusions are presented in Section IV.

F. Sources of Data

The information utilized in the preparation of the Report was obtained from several sources. Historical cash disbursements and cash receipts data was derived from the financial statements of the Sewer Authority and the supporting records for those statements. Current information concerning the Fiscal Year 2021-22 budget for the Sewer System, customer account data and sewer billings and anticipated cash receipts was obtained from the records of the Authority.

SECTION II – REVENUE REQUIREMENTS

This section of the report provides an overview of the current cash requirements of the Sewer System. Fiscal Year 2021-22 cash disbursements for the Sewer System can be classified into ten major categories of cost. A description of each category and the current estimates of Fiscal Year 2021-22 cash disbursements are provided below. Estimated cash requirements are provided for each category of expenditure.

Debt Service (\$7,264,000)

This category of cash disbursements includes the scheduled interest payments to the debt service trustee in Fiscal Year 2021-22 on the outstanding Sewer System Revenue Bonds. The Fiscal 2021-22 Capital Plan reflects a \$77.4MM funding commitment, \$49.4MM of which is for treatment plant rehabilitation projects and \$28MM is for installation of innovative green and smart sewer system infrastructure. \$12MM of the current year capital improvement projects are expected to be funded with the Sewer Authority's 2021 Environmental Impact Revenue Bonds that were issued in the prior fiscal year on June 3, 2021. The balance of the plan will be funded in the most cost-effective manner, either by, operating cash and use of accumulated reserves as pay-as-you-go" capital or additional indebtedness. Approximately \$1MM has been factored into the FY2021/22 cash requirements as additional debt service in anticipation of partially funding the current year capital plan through a capital outlay under the pay-as-you-go methodology. This is reasonable and conservative. Additionally, during 2021, the Authority's General Fund

transferred \$8.1MM to the General Projects Fund to support ongoing capital projects and expenses. At June 30, 2021, financial resources restricted for acquisition, construction or renovation of capital facilities in the General Projects Fund was \$99.8MM, this includes the issuance of the EIB bonds noted above and previously committed fund balance and is net of expenditures of \$13.4MM for capital outlays. Additionally, the Authority's General and Capital Projects Funds at June 30, 2021 had \$10.8MM and \$29.9MM of fund balance committed to capital projects.

The proceeds of the bond issues, together with interest earnings on available funds, are used for three purposes:

- Deposits to the construction fund – This represents the amount necessary to meet the construction needs identified in the Authority's Capital Improvement Plan.
- Deposits to the Debt Service Reserve Fund – This is a standard requirement for revenue bond issues. The Reserve Fund is intended to protect bondholders by providing a dedicated fund which is available to pay debt service in the event the Authority fails to make its annual principal and interest payment. It is typically structured to be equal to the maximum annual debt service, which occurs during the term of the bond issue.
- Cost of issuance – These costs cover the expenses associated with bond underwriters, attorneys, consultants and related expenses.

The following bonds remain outstanding at June 30, 2021:

	Amount	Year of Issue
• Series J1	\$3,743,126	2014
• Series K1	\$2,609,142	2014
• Series L1	\$5,601,881	2015
• Series M	\$6,970,000	2014
• Series N	\$14,281,564	2012
• Series O	\$7,936,830	2021
• EIB	\$49,160,000	2021

In January 2021 the Authority converted its short-term EFC loan payable to long term debt in the amount of \$7,936,860. Series O is interest free and matures in September 2050. Debt service on outstanding issuances and any other contemplated issuance for FY2021-22 is included in the FY2021-22 cash requirements. Total outstanding Authority indebtedness at June 30, 2021 was \$90.3MM and \$4.7MM was available in the Debt Service Reserve Fund to provide for future and annual debt service requirements of the Authority.

General Administration (\$2,132,000)

The management of the business and fiscal affairs of the Authority is the responsibility of the Administrative Department. In general, these affairs include all fiscal operations such as preparation and control of operating and construction budgets, keeping of accounts and books of records, billings and collections, purchasing, maintaining an insurance program against fire, theft and public liability, preparation of all matters relating to bond sales, preparation of payrolls and payroll records, handling investments of funds, and other related matters.

Actual general administration expenditures for Fiscal Year 20-21 were \$1,678,422.

Wastewater Treatment Facilities (\$22,762,000)

The Sewage Treatment Department is responsible for operation, maintenance and repair of the various facilities at the Bird Island Treatment Plant and at the outlying pumping station included in the sewerage system. All units of the plant have been maintained to insure continuous pumping, disinfection and treatment of domestic and industrial wastes in fulfillment of the Authority's basic requirements.

The Bird Island laboratory is an important plant adjunct. Personnel are continually trained to be abreast of all technological advances in the field of sanitary science.

Actual wastewater treatment expenditures for Fiscal Year 20-21 were \$21,680,194

Industrial Waste (\$737,000)

The Industrial Waste Section operates an industrial waste control program, which was developed and initiated on January 1, 1976. This control program was instituted to enable the Buffalo Sewer Authority (Authority) to comply with its State Pollution Discharge Elimination System (SPDES) permit and with Environment Protection Agency (EPA) requirements associated with the acceptance of federal aid by the Authority to upgrade existing facilities and to construct secondary treatment facilities. This control program has been updated and expanded to comply with the requirements of the EPA General Pretreatment Regulations.

The primary objective of the Industrial Waste Section is to monitor and control these industrial discharges, as necessary, to:

- protect the public health,
- protect the receiving stream quality (i.e., the Niagara River),
- enable the Authority to comply with its SPDES permit,
- protect the integrity of the Authority's facilities, and
- administrate Industrial Surcharges and outside service area agreements and charges.

Actual industrial waste expenditures for Fiscal Year 20-21 were \$762,230.

Sewer System Engineering (\$1,305,000)

The Engineering Department handles engineering studies, surveys, preparation of plans and specifications, contract preparation, the construction budget and construction supervision and inspection. It continues to be actively engaged in design, and the preparation of contract drawings and specifications for needed storm water relief sewers and for sewer extension for local area development, and in other work pertinent to the Authority's operations.

Actual sewer system engineering expenditures for Fiscal Year 20-21 were \$1,034,147.

Sewer Maintenance Department (\$5,924,000)

Routine inspection is made of all sewers and of appurtenances of the system such as intercepting and overflow chambers and inverted siphons. Sewers, street inlets and catch basins are cleaned both on a routine preventative maintenance basis and in response to flooding complaints. Sewer repairs are made as necessary and are usually of an emergency nature.

Actual sewer maintenance expenditures for Fiscal 20-21 were \$4,532,469.

Employee Benefits (\$10,612,000)

Employee benefits include the disbursements for the fringe benefits provided to the Authority employees including hospital, dental and life insurance, social security, pension, unemployment insurance and worker's compensation. The Buffalo Sewer Authorities labor agreement with CSEA Local 815, which is the white-collar union of the Authority was settled and runs through June 30, 2022. The labor agreement with the Communications Workers of America (CWA), the blue-collar union was also settled and runs through June 30, 2022. Both agreements addressed issues surrounding wages increases, health insurance, and compensated absences.

Actual employee benefit expenditures for Fiscal 20-21 were \$10,300,000.

City of Buffalo Services (\$3,900,000)

Services provided by the City of Buffalo include Division of Water billings for sewer rent, treasury functions, assessment of properties, and billing of sewer rent based on assessed value, data processing and payroll services as well as legal and auditing services. This amount remains unchanged and is consistent with FY 2020-21.

Miscellaneous and Contingencies (\$1,835,000)

Miscellaneous disbursements include a contingency provision for judgments and claims, a sewer rent adjustment and a contingency for unanticipated expenditures not otherwise covered in the budget.

Actual miscellaneous and contingency expenditures for Fiscal 20-21 were \$4,155,702

Capital Improvements Including Departmental Capital Outlays—On-Going Projects (\$775,000)

Departmental capital outlays are budgeted capital improvements to be made to the System from current operating revenues.

The capital improvement fund is provided to make necessary improvements to the system on an as needed basis. Expected cash disbursements must be adjusted to arrive at the cash requirements for the Sewer System.

Debt Service Coverage Provision (\$1,253,000)

Lastly, the authority has covenanted that from time to time and as often as it shall appear necessary, the rates, charges, rents and sewer rents, fees and assessments established for the Sewer System will be adjusted whenever necessary to cause revenues collected in each fiscal year from the Sewer System to be at least equal to the Minimum Revenue Requirement, which shall be equal to the sum of (i) the amount estimated to be required in the current fiscal year to pay operating expenses and to meet debt service reserve requirements, plus (ii) 120% of debt service for such fiscal year. The budgeted Fiscal Year 2021-22 debt service coverage provision, including an additional reserve totals \$2.3MM.

Total Budgeted Operation and Maintenance Costs for the Sewer System

Based on the preceding categories of cost, the total expected operation and maintenance cash disbursements for the Sewer System in Fiscal Year 2021-22 are \$49,982,000 and includes \$775,000 for capital outlays and on-going projects and \$1.8MM in anticipated funding for contingencies or additional reserves.

SECTION III SEWER RATES AND REVENUES

A. Sewer Rents

The authority has adopted a schedule of sewer rates based upon the assessed valuation of real estate and also based upon water usage. Additionally, the Authority provides for assigning sanitary sewer construction costs to benefiting property owners as a condition precedent to granting a permit to connect such facilities. Outlying communities also utilize the services of the facilities. This is provided under a separate agreement with each of the municipalities.

Largest Customers of the System

An analysis of the customer base of the Sewer System shows that the users of the System are diversified. Only a few customers, represent more than 2% of the sewer billings.

B. Comparison of Buffalo Sewer Rates with the Rates of Other Communities

A significant consideration in evaluating sewer rates is the reasonableness of current rates and charges compared to those of other communities. Rates for the City of Buffalo and other municipalities within New York State have been compared for purposes of comparison, residential user charges are based upon information provided by the identified cities and standardized assumptions regarding water consumption namely 12,000 cubic feet or the equivalent of 89,760 gallons. Annual water use at this volume figure is used consistently for comparative purposes, recognizing that the typical customer in each class in each city may use different volumes of sewer. Finally, average assessed value in each community was considered.

The Buffalo Sewer Authority's rates have historically been low on average in comparison to other communities.

C. Rate Setting Actions of the Buffalo Sewer Authority

The total assessed value of property applicable for sewer purposes is \$12,689,556,420 and the levy of sewer rents based on assessed value for 2021-22 will remain constant at \$12,050,000. This will result in an annual sewer rent of approximately \$0.94959978 per \$1,000 of assessed valuation which is an adjustment of (\$0.00412092) from the previous year based on an increase to the assessed value. Sewer rents will increase or decrease by \$.00026927 for each \$1MM change in assessed value in order to maintain the levy. All flat and metered accounts will continue to be assessed a capacity/drainage charge at a minimum of \$6.00 per month. The estimated user payments for Fiscal Year 2021-22 reflect these consistent Sewer Authority actions.

D. Fiscal Year 2020-21 Receipts and Projected Fiscal Year 2021-22 Receipts

Metered and Flat Sewer Rents

Cash receipts from user charges were \$24.7MM for Fiscal Year 2020-21. This reflects actual cash receipts through June 2021. The global pandemic has negatively impacted cash receipts for Fiscal Year 2020-21 by 8.5% or \$2.3MM. The original budgeted cash receipts in Fiscal Year 2021-22 are \$26.2MM and reflect no increase in rates or charges and a consistent customer base in the City of Buffalo and a partial recovery in receipts from the pandemic. The global pandemic continues to negatively impact cash receipts in FY2021-22 as receipts are trending 4.2% below budget through November 2021. Cash receipts through November total \$10.2MM, and annualized are projected at \$25.2MM which is \$1.1MM under budget. Up to \$6.5MM in ARPA funding can be utilized to provide relief for eligible, delinquent low-income residential accounts, thereby increasing metered and flat receipts. This funding was not reflected in the Authority's original Fiscal Year 2021-22 Budget.

Assessment Sewer Rent (\$12,093,000)

The Authority also charges a sewer rent based upon the assessed valuation of all real property in the City (except as exempted by law). The total assessment sewer rent is budgeted at \$12,050,000 for Fiscal Year 2021-22 which is consistent with the prior year. Although the estimated assessed value of chargeable property for Fiscal Year 2021-22, has decreased. Sewer rents will increase or decrease by \$.00026927 for each \$1MM change in assessed value in order to maintain the levy. Actual Fiscal Year 20-21 assessment sewer rents were \$12,285,366.

Outside City Contracts (\$14,000,000)

There are currently eight service contracts involving communities outside the corporate limits of the city from which the Authority receives and treats sanitary sewage.

The contract areas are billed in accordance with an agreement using actual measured flows that are discharged into the Authority's facilities in relation to total flow received at the Treatment Plant. Actual operating and maintenance costs and capital costs of the facilities used are applied to each billing. The charge for the ensuing fiscal year is in an amount representing the actual capital and operating costs to the Authority over the most recently completed fiscal year of treating the estimated flow from the district. During the year ended June 30,2020, due to the effects of the pandemic, there was a delay in the measurement of these billings and, as such, certain out of district revenues were not recognized until fiscal year ended June 30, 2021. These amounts even out over both years. Actual Fiscal Year 20-21 outside city contracts were \$18,827,354.

Industrial Waste (\$3,830,000)

Industrial waste revenue accounts for less than 2.5% of Sewer Authority revenues. This category mainly includes charges for hauling and surcharges relating to industrial type waste from commercial users of the system. Actual industrial waste revenues for Fiscal year 20-21 were \$3,561,368

Interest Income (\$1,090,000)

Interest income includes interest on investments from both the operating and debt service funds. The Authority continues to invest based on a funding requirement that matches with cash/investment liquidity. Historical returns have been 2-2.5%, and excess funds are reinvested real-time and measured against upcoming cash flow needs. Another result of the ongoing pandemic is the decline in interest rates. Rates are currently averaging .50-.75%. Accordingly, interest income is trending approximately \$296,000 below budget as projected through Fiscal Year 21-22. Interest income for Fiscal Year 20-21 was \$261,344.

Miscellaneous (\$1,250,000)

Miscellaneous revenue includes user fees for specific services provided. These revenues are derived from billing services for the Buffalo Sewer Authority. Actual miscellaneous revenues for Fiscal Year 20-21 were \$1,013,849.

SECTION IV – CONCLUSIONS

Based on the information presented in Sections I through III, current Authority budget estimates of cash receipts in Fiscal Year 2021-22 and actual cash receipts through November 30, 2021, despite the decline due to the pandemic, do in fact exceed the amount required for the anticipated annual budgeted cash requirements and are further bolstered by the ARPA funding available to address low-income residential account deficiencies. This is consistent with the stated goals of building a reserve balance to a level expected by rating agencies for an Authority the size of the Buffalo Sewer Authority and to support capital improvements to the System over the long term.

The current budgeted reserves for Fiscal Year 2021-22 are \$4.1MM. This does not reflect any savings ultimately realized through efficiencies gained in System operations. Accumulated unrestricted reserves through June 30, 2021 total \$83.4MM.

No adjustments to current rates and/or drainage/capacity charges are proposed for consideration by the Authority at this time.

January 13, 2022

ANTICIPATED FISCAL 2021-22 CASH REQUIREMENTS

Cash Requirements

Debt Service \$ 7,264,000

Operating Disbursements:

General administration	\$ 2,132,000
Wastewater Treatment Facilities	22,762,000
Industrial Waste	737,000
Sewer System Engineering	1,305,000
Sewer Maintenance Department	5,924,000
Employee benefits	10,612,000
City of Buffalo and Collection Services	3,900,000
Miscellaneous and contingency	1,835,000
Capital Improvements, including Departmental capital outlays & -on-going projects	775,000

Total operating disbursements 49,982,000

Total cash disbursements 57,246,000

Less amounts available for use for
Capital Improvements (775,000)

Total anticipated cash requirements \$56,471,000

Minimum debt service coverage provision on outstanding indebtedness: \$1,253,000

Minimum Required debt service coverage: 1.20

Budgeted debt service coverage:(w/\$4.1MM in reserves and \$6.5MM in ARPA funds)2.81

Exhibit 2

ANTICIPATED FISCAL 2021-22 CASH RECEIPTS

Cash Receipts

Operating Revenue:

Metered and Flat Sewer Rents	\$ 32,737,000
Assessment Sewer Rent	12,093,000
Outside City Contracts	14,000,000
Industrial Waste	3,830,000

Other Revenues:

Interest Income	1,090,000	
Miscellaneous	<u>1,250,000</u>	
Total anticipated cash receipts		<u>\$65,000,000</u>

Note: Fiscal 2021-22 Total anticipated cash receipts above include \$6.5MM in expected ARPA funding.