

TOWN OF BRIDGEWATER

OFFICE OF THE TOWN COUNCIL



Budget & Finance Committee Meeting Agenda Monday, June 6, 2022 6:00p.m.

Committee Members:

*William Wood, Chair
Precinct 6 Councilor*

*Shawn George, Member
Precinct 3 Councilor*

*Dennis Gallagher, Member
Councilor-At-Large*

Location: Virtual Via Zoom

To Attend via Video, Click the link below:

<https://us06web.zoom.us/j/81670941070>

Call In: 1-646-876-9923

Meeting ID: 816 7094 1070

1. Call to Order – 6:00p.m.
2. Public Comment
3. Approval of Meeting Minutes
4. Legislation Referred
 - a) Order O-FY23-006: CPA Reserve Account – FY2023 (*Town Manager*)
At their 5/18/22 meeting, FinCom voted 5-0 to recommend.
 - b) Order O-FY22-069: Water (SDC) System Development Charges (*Town Manager*)
 - c) Order O-FY22-070: Water Rates (*Town Manager*)
5. Public Comment
6. Adjournment



Bridgewater Town Council

In Town Council, Tuesday, May 24, 2022

Council Order: FY23-006

Introduced By: Town Manager
 Date Introduced: May 10, 2022
 First Reading: May 10, 2022
 Second Reading: May 24, 2022, June 7, 2022
 Amendments Adopted:
 Third Reading:
 Date Adopted:
 Date Effective:

Order O-FY23-006

CPA RESERVE ACCOUNTS – FY2023

ORDERED, Pursuant to Section 6-4 of the Town of Bridgewater Charter, that the Town Council of Bridgewater, Massachusetts in Town Council assembled vote to appropriate from the *Community Preservation Fund* FY2023 estimated annual revenues the sum of **\$40,000**. to meet the administrative expenses, and all other necessary and proper expenses of the Community Preservation Committee for Fiscal Year 2023.

And further,

To reserve for future appropriation from the *Community Preservation Fund* FY2023 estimated annual revenues the sum of **\$307,500** for the acquisition, creation, and preservation of open space; **\$153,750** for acquisition, preservation, restoration, and rehabilitation of historic resources; and **\$102,500** for the acquisition, creation, preservation, and support of community housing.

And further,

To appropriate **\$25,900** to Budgetary Reserves.

And further,

To appropriate **\$345,000** for the payment of debt related to the Academy Building renovation from FY2023 estimated revenues.

And further,

To appropriate **\$50,350** for the payment of debt related to the Keith Homestead purchase from FY2023 estimated revenues.

Committee Referrals and Dispositions:

Referral(s)	Disposition(s)
• B&F	• Meeting on 6/6/22.
• FinCom	• 5/18/22: Voted 5-0 to recommend.



Bridgewater Town Council

In Town Council, Tuesday, May 24, 2022

Council Order: O-FY22-069

Introduced By: Town Manager
 Date Introduced: May 24, 2022
 First Reading: May 24, 2022
 Second Reading/Hearing: June 7, 2022
 Amendments Adopted:
 Third Reading:
 Date Adopted:
 Date Effective:

Order O-FY22-069

WATER (SDC) SYSTEM DEVELOPMENT CHARGES

Whereas, the Town Manager is recommending an increase in the SDC (System Development Charge) for both domestic and commercial property. This charge will be assessed to customers with expanding needs or new customers that connect to the Town’s water system (Water Treatment Plant(s) and Water Delivery System - Waterlines). These demands require that the Water Department continuously invest in upgrades and improvements to our physical plant and our waterline delivery system. These charges will offset a portion of the current expansion and all other improvements to the Town’s water system. These charges will be accounted for and segregated separately from all other Water Revenue and can and will only be used for Capital Improvements to the Water Treatment Plant(s) and Water Delivery System.

The charges are calculated based on the Buy-in Method (Equity Method) and the Equivalent Resident Method (ERU) so that new water customers and expanding demand from existing customers pay their fair share of the remaining life of the fixed assets (Equity) and that existing customers who expand are charged for the additional capacity that they require.

Therefore, Ordered that the Town Council vote to ratify the SDC Charges pursuant to the Buy-in and ERU methodology.

Committee Referrals and Dispositions:

Referral(s)	Disposition(s)
• B&F	• Meeting 6/6/22
• FinCom	• 6/1/22:



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May 17, 2022

Mr. Anthony Sulmonte
Finance Director
Town of Bridgewater
66 Central Square
Bridgewater, MA 02324

Dear Mr. Sulmonte,

This report and the accompanying System Development Charge (SDC) were prepared for the Town of Bridgewater Water Department to charge new customers requesting water service and current customers expanding their facilities. The SDC is based on the current net book value of the water department's fixed assets.

We have compiled the Systems Development Charge in accordance with applicable guidelines established by the American Water Works Association. This report completes our requirements to prepare the System Development Charge.

We wish to thank everyone who assisted us during this project.

Very truly yours,

A handwritten signature in blue ink, appearing to read "D. Gardner", with a long horizontal flourish extending to the right.

Douglas W. Gardner
President

SUMMARY

The purpose of this study was to prepare the System Development Charge based on the current water fixed assets. We included the near complete water treatment facility in our calculations but no other long term and short term future capital improvements.

Introduction

The Town of Bridgewater Water Department has water related improvements that are needed to meet their current and future needs and demands. Customers expanding their needs or a new customer connecting to the system will be required to pay an amount equal to that already paid by the current customers towards the invested capital funds.

The single-family houses, condos, townhouses, etc. are expected to increase during the next five years. This requires that the department invest in expansion and improvement of the physical plant (water system). However, the current expansion and improvement of the water system is not being recovered, in part, through a System Development Charge. The purpose of this study is to calculate a SDC based on the Buy-in Method so that new water customers and expanding customers are paying their share of the remaining life of the fixed assets and existing customers who expand are charged for the additional capacity (ERU).

Recommendations

We recommend the department approve the recommended SDC and ERU charges presented on Exhibit 3, "System Development Charges".

There are two ways to charge for the SDC.

1. The Buy in Method or Equity Method.

The Buy in Method is a flat rate charge per dwelling that requires a 1" connection. Larger connection sizes will result in a larger SDC. Refer to Exhibit 1, "System Development Charge".

The recommended Buy in Method SDC is \$3,482, rounded up to \$3,500, for a 1" connection. Larger connections should be charged at the increased amount as shown on Exhibit 3. The amounts for the larger connections were calculated using the AWWA criteria for increasing connection sizes.

All dedicated fire services are charged a separate SDC based on connection size.

2. The ERU, "Equivalent Residential Unit"

The ERU method is based on the expansion of both domestic and commercial property. It can be used for the expansion of a dwelling, such as adding a new bedroom, a new bathroom, expansion of a restaurant etc. Expansion of services or an expansion of the number of living units for existing customers should be based on the ERU's, i.e., an increase in usage totaling more than 10 percent over a three year average or those who are expanding facilities.

The calculated ERU charge is \$3,482 (rounded to \$3,500), per addition based on the percent of one unit.

Enforcement of these provisions is dependent on the water district working closely with the Town of Raynham building department.

**TOWN OF BRIDGEWATER WATER DEPARTMENT
SYSTEM DEVELOPMENT CHARGE
FIXED ASSET LISTING**

The fixed asset listing (Schedule 1) was prepared based on data received from the water department. The fixed assets study was prepared through June 30, 2021 and based on the district's audited financial statements. The fixed asset original cost was based on actual costs or estimated original cost. The fixed asset data was prepared to provide the original cost of the water fixed assets. The original cost includes \$14,958,916 of current and future costs for the new water treatment facility.

Once the estimated original cost was determined, the depreciation was calculated based on the expected useful life of the fixed asset. Depreciation was based on the straight line method with a half-year's depreciation in the year of purchase and retirement.

The "Fixed Asset Listing Summary", Schedule 1, summarizes the fixed assets by type of asset and provides the original cost, accumulated depreciation, and net book value through June 30, 2021. The total original cost is \$62,195,098 and the net book value totals \$49,614,762.

The fixed asset data is the basis of the Buy-in method of calculating a SDC.

**TOWN OF BRIDGEWATER, MASSACHUSETTS
WATER DEPARTMENT
FIXED ASSET SUMMARY**

Schedule 1

Fiscal Year 2021

Description	Original Cost	Accumulated Depreciation	Net Book Value
1910 LAND	\$3,745,700	\$0	\$3,745,700
1920 BUILDINGS	\$579,000	\$369,030	\$209,970
1930 PLANT, MAINS, ETC.			
Tanks and Standpipes	\$2,412,650	\$1,426,671	\$985,979
Mains	\$33,315,914	\$8,114,714	\$25,201,200
Hydrants	\$1,488,395	\$441,012	\$1,047,383
Valves	\$0	\$0	\$0
Wells	\$255,632	\$112,864	\$142,768
Total	\$37,472,591	\$10,095,262	\$27,377,329
1940 EQUIPMENT			
Equipment	\$5,153,858	\$1,834,905	\$3,318,953
TOTAL EQUIPMENT	\$5,153,858	\$1,834,905	\$3,318,953
1950 VEHICLES	\$285,033	\$281,139	\$3,894
1990 CONSTRUCTION IN PROGRESS	\$14,958,916	\$0	\$14,958,916
TOTAL	\$62,195,098	\$12,580,335	\$49,614,762

**TOWN OF BRIDGEWATER WATER DEPARTMENT
SYSTEM DEVELOPMENT CHARGE**

Exhibit 1

BUY-IN METHOD (Equity Method)

The "Buy-in Method" is calculated based on the cost to connect to the current water system. Adjustments for the distribution system costs, debt service principal outstanding, and similar local facilities serving existing customers are deducted from the total cost because they are classified as maintenance type costs, not facility costs.

The "System Development Charge - Buy in Method, Exhibit 1, is the basis for calculating the SDC based on an equivalent meter size for existing capacity.

The fixed asset costs are listed by types of asset group summarized from Schedule 1, Fixed Asset Listing and Depreciation. The estimated net book value is \$49,614,762 as of June 30, 2021.

The amounts that represent the all facilities' net book value, i.e., "Net Investment in Back Up Plant" represents Total Cost less Net Cost (local facilities). The local facilities (\$685,147) represent water mains (6" and under), valves and hydrants (\$1,047,383), that service customers directly and are not included in the calculation of the facilities that all customers use jointly. The Net Investment in Back Up Plant is \$47,882,233.

The "Outstanding Bonds" that represent facilities that service customers directly are also deducted from the total. The outstanding principal debt is \$15,019,920 and includes new and anticipated debt associated with the new treatment facility.

The "Total Equity Investment" is calculated by subtracting the outstanding bonds from the Net Investment in Back Up Plant. The Total Equity Investment is \$32,862,313.

The "Number of Customers" was based on the total customers from the FY 2023 water rate study and totals 7,835.

The "Equivalent Units" are calculated based on 9,437 Equivalent Units for current customers and an estimated 0 for future customers based on the equivalent units.

The "Average Net Equity Investment for a 1" connection is obtained by dividing the "Total Equity Investment" by the "Equivalent Units", which results in \$3,482, rounded to \$3,500 per equivalent unit.

The SDC for each water service base on connection size has been calculated for a 1" connection up to a 12-inch connection. The basic charge is \$3,500 for a 1" connection.

**BRIDGEWATER WATER DEPARTMENT
SYSTEM DEVELOPMENT CHARGE CALCULATION**

Exhibit 1

	Original Cost	Accumulated Depreciation	Net Book Value
Land	\$3,745,700	\$0	\$3,745,700
Building	\$579,000	\$369,030	\$209,970
Mains - 6" and less	\$1,245,919	\$560,772	\$685,147
Mains - 8" and over	\$32,069,995	\$7,553,942	\$24,516,053
Tanks	\$2,412,650	\$1,426,671	\$985,979
Well	\$255,632	\$112,864	\$142,768
Machinery & Equipment	\$5,153,858	\$1,834,905	\$3,318,953
Hydrants	\$1,488,395	\$441,012	\$1,047,383
Vehicles	\$285,033	\$281,139	\$3,894
Construction. in Progress	\$14,958,916	\$0	\$14,958,916
Total	\$62,195,098	\$12,580,335	\$49,614,762
Less: Distribution System			
Mains and Valves 6" Less			\$685,147
Hydrants			\$1,047,383
All Facilities Net Investment			<u>\$47,882,233</u>
Less: Outstanding Bonds			<u>\$15,019,920</u>
Total Equity Investment			\$32,862,313
Number of Customers			7,835
Total Equivalent Units			9,437
Average Net Equity Investment 1" Service			\$3,482
		Flow Factor Equivalent	SDC
Connection Size			
1"		1	\$3,482
1 1/2"		5	\$17,411
2"		8	\$27,858
3"		16	\$55,717
4"		25	\$87,057
6"		50	\$174,114
8"		80	\$278,583
10"		115	\$400,463
12"		155	\$539,754

TOWN OF BRIDGEWATER WATER DEPARTMENT
SYSTEM DEVELOPMENT CHARGE
Equivalent Residential Units (ERU'S)
Exhibit 2

The Equivalent Residential Units method is based on the estimated cubic feet per day (CFPD) of water consumed by a single-family residence.

The average family of three persons results in 23.47 cubic feet per day (CFPD) of water usage. The CFPD is detailed on Exhibit 2. The total billable flow from the FY 2023 rate study totaled 67,126,000 cubic feet annually divided by 365 days results in 183.907 CFPD. The customer base is 7,835 customers. The daily household consumption of 23.47 CFPD divided by the average household of 3 customers results in 7.82 cubic feet daily.

Calculation of the ERU's,

The "Calculation of the ERU's" was calculated as follows:

The total equity investment of \$32,862,313 was obtained from Schedule 1.

The average daily consumption of 183.907 CFPD was based on total metered consumption. The total equity investment of \$32,862,313 divided by CFPD, results in a total cost of \$178.69 per ERU.

The cost per residential unit is \$4,194.30 (23.47 CFPD x \$178.69 per ERU).

The cost per residential unit can now be used to calculate the cost per meter size or cost per water usage by type of customer.

The ERU's is an estimate of water usage volume in the Town of Bridgewater Water Department. The estimates of water usage per day were obtained from a national publication, Plumbing Design & Installation Details, Page 51, Table 4.5a, "Design Criteria for Daily Water Requirements based on Building Occupancy." We have calculated the most common types of businesses; however, the list is not intended to be all-inclusive (Exhibit2).

One of the requirements for new connections is to estimate usage requirements before a permit is issued. This is expressed in ERU's. The appropriate impact fee can then be calculated.

BRIDGEWATER WATER DEPARTMENT
Equivalent Residential Units

Exhibit 2

Calculation of Cubic Feet per Day

Annual Consumption (cubic feet)	67,126,000
Days in Year	<u>365</u>
Average Daily Consumption	183,907
Customers	<u>7,835</u>
Consumption per household per day	23.47
Average Household	<u>3</u>
Consumption per person per day	7.82

Calculation of Equivalent Residential Units (ERU's)

Average Daily Consumption	183,907
Total Equity Investment	<u>\$32,862,313</u>
Total Cost per ERU	\$178.69
Consumption per household, per day	<u>23.47</u>
Cost per Residential Unit	<u><u>\$4,194.30</u></u>



Bridgewater Town Council

In Town Council, Tuesday, May 24, 2022

Council Order: O-FY22-070

Introduced By: Town Manager
 Date Introduced: May 24, 2022
 First Reading: May 24, 2022
 Second Reading/Hearing:
 Amendments Adopted:
 Third Reading:
 Date Adopted:
 Date Effective:

Order O-FY22-070

WATER RATES

Whereas, the Town Manager is recommending an increase in the Metered Consumption Charge and Quarterly Minimum Charge to cover the cost of the debt service and the operating costs for the “New High Street Water Treatment Facility”. This requires that the Revenue from Water User Charges generate \$1,500,000 in revenue over what is currently being generated – from approximately \$3,300,000 to \$4,800,000. To achieve this the Metered Consumption Charge is to be increased by 24%, coupled with an increase to the Quarterly Minimum Charge. The Quarterly Minimum Charge increase will be dependent upon the meter size.

A summary of the recommended increase to the quarterly Minimum Charge and the Metered Consumption Charges are attached.

Therefore, Ordered that the Town Council vote to ratify the increase in the Metered Consumption Charge and Quarterly Minimum Charge.

Explanation: The Town of Bridgewater is obligated to pay the principal and interest on the previously authorized debt for the construction of the town’s “New High Street Water Treatment Facility” which will be going online this coming fall.

Committee Referrals and Dispositions:

Referral(s)	Disposition(s)
•	•

TOWN OF BRIDGEWATER, MA							Exhibit 1
Current vs Proposed Rates & Charges							
Water Division	Current Rates FY 2022	Proposed Water Rates					
		FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	
Minimum Charge - Quarterly							
Up to 1"	\$12.50	\$25.00	\$25.00	\$25.00	\$25.00	\$25.00	
1"	\$12.50	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	
1 1/2"	\$12.50	\$125.00	\$125.00	\$125.00	\$125.00	\$125.00	
2"	\$12.50	\$200.00	\$200.00	\$200.00	\$200.00	\$200.00	
3"	\$12.50	\$400.00	\$400.00	\$400.00	\$400.00	\$400.00	
4"	\$12.50	\$625.00	\$625.00	\$625.00	\$625.00	\$625.00	
6"	\$12.50	\$1,250.00	\$1,250.00	\$1,250.00	\$1,250.00	\$1,250.00	
Meter Water Charges - Quarterly - per 100 CF							
1st Step 1-1,500 CF	\$2.81	\$3.48	\$3.48	\$3.48	\$3.48	\$3.48	
2nd Step 1,501-10,000 CF	\$5.94	\$7.37	\$7.37	\$7.37	\$7.37	\$7.37	
3rd Step Over 100,000 CF	\$7.28	\$9.03	\$9.03	\$9.03	\$9.03	\$9.03	
Private Fire Protection - Annual Charge							
Hydrant	\$250.00	\$475.00	\$475.00	\$475.00	\$475.00	\$475.00	
2"	\$40.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	
3"	\$80.00	\$150.00	\$150.00	\$150.00	\$150.00	\$150.00	
4"	\$125.00	\$250.00	\$250.00	\$250.00	\$250.00	\$250.00	
6"	\$250.00	\$475.00	\$475.00	\$475.00	\$475.00	\$475.00	
8"	\$400.00	\$750.00	\$750.00	\$750.00	\$750.00	\$750.00	
10"	\$580.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	\$1,000.00	
Backflow Prevention							
First Device Tested	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	\$75.00	
Second Device	\$25.00	\$50.00	\$50.00	\$50.00	\$50.00	\$50.00	
Fittings	\$2.00	\$5.00	\$5.00	\$5.00	\$5.00	\$5.00	