



TOWN OF MAYNARD
Department of Public Works
MUNICIPAL BUILDING

195 Main Street
Maynard, MA 01754
Tel: 978-897-1317 Fax: 978-897-7290
www.townofmaynard-ma.gov

Justin DeMarco
Director of Public Works

Administration Cemetery & Parks Facilities Highway Water & Sewer WWTF

Memorandum

To: Board of Selectman (Water & Sewer Enterprise Commissioners)
From: Justin DeMarco, Director of Public Works
CC: Greg Johnson, Town Administrator
Date: December 30, 2020
Subject: Water & Sewer Utility Rates Adjustments for Fiscal Year 2022 (FY22)

Recommended Action:

Motion to approve the water and sewer utility use rates for fiscal year 2022 (FY22) as listed in exhibit 1 (water) and exhibit 1A (sewer) to be effective July 1, 2021.

*Note: Water and Sewer use is read and billed at the end of each quarter. fourth quarter use from April – June 2021 will be billed at adjusted rate in exhibit 1 & 1a, effective July 1st, 2021.

Purpose:

Given the current financial environment of the community in conjunction with the age, and condition of the water and sewer utility, the need to review and adjust rates on a regular basis is necessary. Services such as water & sewer utilities should be financially stable, allowing the department to produce a consistent and reliable utility. Our current utility lacks the water production capability to support economic growth opportunities throughout the community.

This rate change will continue to help stabilize the water and sewer utility enterprise fund with a steady increase to retained earnings in order to meet our Pioneer Consulting Group (PCG) recommended funding-level goal of 50% of annual direct cost and debt service.

This rate increase will pay for Treatment Plant #4 upgrades associated with the onboarding of the communities new water source Well 4A. Treatment Plant #4 upgrades will address water processes, facility integration, and address aging deficiencies related to the Treatment plant in conjunction with the installation of Well 4A.

This rate change adds a dedicated yearly capital improvement line item for the Town of Maynard Wastewater Treatment Facility (WWTF). The rates do not increase the current capital improvements lines in both Water and Sewer yearly operating budgets from FY21.

This rate change will allow the Water and Sewer Department to continue to reach the state's Department of Environmental Protection (DEP) recommended staffing levels associated with a

utility of our size, and complexity. We continue to implement our staffing plan in a manner of small incremental increases as to not burden the rates with a spike increase.

Impact:

Water and Sewer use is read and billed at the end of each quarter. Fourth quarter use from April – June 2021 will be billed at adjusted rate in exhibit 1 & 1A, effective July 1, 2021.

Maynard uses a tiered water & sewer rate system. The average water and sewer use rates fall within the 1,500cf – 2,500cf range per quarter, with some users in the low range of 500cf per quarter, and others over 5,000cf per quarter.

The financial impact with the rate change will financially affect the average household within the community as follows for the use of both Water & Sewer utilities use rates:

- 1,500cf of use: additional cost: x Conversion to cost per gallon = \$0.00085
 - Per year = \$38.20
 - Per quarter = \$9.55
 - Per month = \$3.18
- 2,000cf of use: additional cost: x Conversion to cost per gallon = \$0.00083
 - Per year = \$49.80
 - Per quarter = \$12.45
 - Per month = \$4.15
- 2,500cf of use: additional cost: x Conversion to cost per gallon = \$0.00082
 - Per year = \$61.40
 - Per quarter = \$15.35
 - Per month = \$5.12

Outreach Process:

Inform residents through Website, Facebook, Hyper-link, published local papers, memo placed in water & sewer bill prior to adoption, other.

Background:

The Department of Public Works (DPW), in conjunction with the Finance Director, Treasurer/Collector's office, and Pioneer Consulting Group (PCG) as a subject matter expert, developed our recommended rate scenario as seen in exhibit 1 & 1A.

Analysis consisted of the following:

- Current & Past water use rates
- Current & Past financial trends
 - Revenue
 - Expenditure
 - Debt
 - Exemptions
- Water & Sewer Capacity
- Water & Sewer Capital improvement plan
- Wastewater Treatment Plant Capital Improvement plan
- Current & Future development

- Comparable water district rates

Our current FY21 Sewer retained earnings will allow the Department to utilize a one-time payment in lieu of debt services to procure one (1) Vactor/Jet truck to replace the departments current 30-year old primary utility maintenance/repair/installation equipment. Current Sewer retained earnings do not represent the receipt of a one-time reimbursement payment from Capital Group (Maynard Crossing developer) for the down-stream sewer improvement project related to the MassWorks grant receipt and development agreement (Memorandum of Agreement, MOA) expenditure shares associated with project. Capital Group's share of \$200,000 one-time payment will be reflected in FY22 retained earnings.

This rate change will not provide for the development of two vital sewer models:

1. Loads and Flow
2. Bio-Winn

Each will work in tandem to allow the town to properly determine its sewer capacity for both current and future capabilities for the town's wastewater treatment plant to support development.

This rate change will not provide a funding mechanism for the following: Redesign and Construction of Old Marlborough road treatment facility to re-activate closed well (0.5MGD), Whites pond piloting and permitting process (1.0MGD), and Rockland well expansion pilot and permitting process (0.3MGD).

Supplemental Information:

The Water and Sewer Division is responsible for ensuring that the town's water supply meets or exceeds all federal Environmental Protection Agency (EPA) and state DEP guidelines for safe drinking water and that all wastewater is collected and delivered to the wastewater treatment plant.

Maynard's Wastewater Treatment Facility (WWTF) is responsible for ensuring that all effluent discharged into the Assabet River meets or exceeds all EPA and DEP requirements.

The town of Maynard's water and sewer department operates and maintains three water treatment plants located in Maynard, with the ability to produce (1.13MGD) utilizing all three treatment plants. Maynard's average daily water use was (0.78MGD) in 2019, which is an increase of (0.10MGD) from the previous year's use.

Our 2019 Average daily use does not represent the spike in use caused by COVID-19 "stay at home restrictions". Water use related to COVID-19 restrictions and the current occupancy taking place at Maynard Crossing will see a significant spike in Average daily use.

Over 100 miles of underground water and sewer distribution piping. Ranging in age of install from 1900 – 1990, with most of the distribution system well over 70 years old.

10 sewer pump stations at various locations across town. Ranging in age of install from 1970 – 1990, with most of the pumping systems over 30 years old.

The town of Maynard has a Wastewater Treatment Facility (WWTF) is operated through a contractor, Veolia. The town is responsible for capital costs and contracted operational costs associated with the plant's operation.

Attachments:

- "Setting Water Rates in Massachusetts: Important Lessons Learned from Suppliers" Massachusetts joint research study conducted by DER and DCR
- Summary of findings
- Water capacity memo
- Town of Maynard Water and Sewer Capital Improvement Plan
- Town of Maynard Water and Sewer Staffing Plan
- Well #4A & Treatment Plant #4 estimated cost sheet

TOWN OF MAYNARD, MA
Current vs Proposed Rates & Charges
Water Division

Exhibit 1

	Current Rates FY 2021	Proposed 1 Year Rate FY 2022	Dollar Increase	Percentage Increase
IN TOWN CUSTOMERS				
Minimum Charge - Quarterly - Includes 0 CF	\$22.00	\$25.00	\$3.00	13.64%
Meter Water Charges - Quarterly - per 100 CF				
1st Step 1-500 CF	\$2.78	\$2.78	\$0.00	0.00%
2nd Step 501-1,000 CF	\$7.11	\$7.34	\$0.23	3.23%
3rd Step 1,001-2,500 CF	\$7.72	\$7.97	\$0.25	3.24%
4th Step Over 2,500 CF	\$8.88	\$9.25	\$0.37	4.17%
OUT OF TOWN CUSTOMERS				
Minimum Charge - Quarterly - Includes 0 CF	\$30.00	\$34.00	\$4.00	13.33%
1st Step 1-500 CF	\$3.89	\$3.89	\$0.00	0.00%
2nd Step 501-1,000 CF	\$9.96	\$10.28	\$0.32	3.21%
3rd Step 1,001-2,500 CF	\$10.81	\$11.16	\$0.35	3.24%
4th Step Over 2,500 CF	\$12.43	\$12.95	\$0.52	4.18%
Private Fire Protection - Annual Charge				
Hydrant	\$250.00	\$250.00	\$0.00	0.00%
2"	\$40.00	\$40.00	\$0.00	0.00%
3"	\$80.00	\$80.00	\$0.00	0.00%
4"	\$125.00	\$125.00	\$0.00	0.00%
6"	\$250.00	\$250.00	\$0.00	0.00%
8"	\$400.00	\$400.00	\$0.00	0.00%
10"	\$580.00	\$580.00	\$0.00	0.00%
Backflow Prevention				
Per Test	\$75.00	\$75.00	\$0.00	0.00%

**TOWN OF MAYNARD, MA
WATER ENTERPRISE FUND
IMPACT ANALYSIS - FY 2022**

Exhibit 2a

Meter Size	Quarterly Quantity Cubic Feet	Current Rates Quarterly	Proposed Rates Quarterly	Difference	Percentage Difference
	0	\$22.00	\$25.00	\$3.00	13.64%
	100	\$24.78	\$27.78	\$3.00	12.11%
	200	\$27.56	\$30.56	\$3.00	10.89%
	300	\$30.34	\$33.34	\$3.00	9.89%
	400	\$33.12	\$36.12	\$3.00	9.06%
Low usage	500	\$35.90	\$38.90	\$3.00	8.36%
	1,000	\$71.45	\$75.60	\$4.15	5.81%
	1,500	\$110.05	\$115.45	\$5.40	4.91%
	2,000	\$148.65	\$155.30	\$6.65	4.47%
Average usage	2,500	\$187.25	\$195.15	\$7.90	4.22%
	3,000	\$231.65	\$241.40	\$9.75	4.21%
	3,500	\$276.05	\$287.65	\$11.60	4.20%
	4,000	\$320.45	\$333.90	\$13.45	4.20%
	4,500	\$364.85	\$380.15	\$15.30	4.19%
	5,000	\$409.25	\$426.40	\$17.15	4.19%
	6,000	\$498.05	\$518.90	\$20.85	4.19%
	7,000	\$586.85	\$611.40	\$24.55	4.18%
	8,000	\$675.65	\$703.90	\$28.25	4.18%
	9,000	\$764.45	\$796.40	\$31.95	4.18%
	10,000	\$853.25	\$888.90	\$35.65	4.18%
	12,500	\$1,075.25	\$1,120.15	\$44.90	4.18%
	15,000	\$1,297.25	\$1,351.40	\$54.15	4.17%
	17,500	\$1,519.25	\$1,582.65	\$63.40	4.17%
	20,000	\$1,741.25	\$1,813.90	\$72.65	4.17%
	30,000	\$2,629.25	\$2,738.90	\$109.65	4.17%
	40,000	\$3,517.25	\$3,663.90	\$146.65	4.17%

TOWN OF MAYNARD - DPW
Current vs Proposed Rates & Charges
Sewer Division

Exhibit 1a

	Current Rates FY 2021	Proposed One Year Rate FY 2022	Dollar Increase	Percentage Increase
IN TOWN CUSTOMERS				
Minimum Charge - Quarterly - Includes 0 CF	\$50.00	\$50.00	\$0.00	0.00%
Meter Sewer Charges - Quarterly - per 100 CF				
1st Step 1-500 CF	\$5.78	\$5.95	\$0.17	2.94%
2nd Step: 501-2,500 CF	\$11.13	\$11.46	\$0.33	2.96%
3rd Step: Over 2,500 CF	\$13.65	\$14.06	\$0.41	3.00%
OUT OF TOWN CUSTOMERS				
Minimum Charge - Quarterly - Includes 0 CF	\$73.75	\$73.75	\$0.00	0.00%
Meter Sewer Charges - Quarterly - per 100 CF				
1st Step: 1 - 500 CF	\$8.09	\$8.33	\$0.24	3.00%
2nd Step: 501 - 2,500 CF	\$15.58	\$16.05	\$0.47	3.00%
3rd Step: Over 2,500 CF	\$19.11	\$19.68	\$0.57	3.00%

**TOWN OF MAYNARD - DPW
IMPACT ANALYSIS
Sewer Division - FY 2022**

Exhibit 2a

Meter Size	Quarterly Quantity Cubic Feet	Current Rates Quarterly	Proposed Rates Quarterly	Difference	Percentage Difference
All Sizes	0	\$50.00	\$50.00	\$0.00	0.00%
	100	\$55.78	\$55.95	\$0.17	0.30%
	200	\$61.56	\$61.90	\$0.34	0.55%
	300	\$67.34	\$67.85	\$0.51	0.76%
	400	\$73.12	\$73.80	\$0.68	0.93%
Low Usage	500	\$78.90	\$79.75	\$0.85	1.08%
	1,000	\$134.55	\$137.05	\$2.50	1.86%
	1,500	\$190.20	\$194.35	\$4.15	2.18%
	2,000	\$245.85	\$251.65	\$5.80	2.36%
Average User	2,500	\$301.50	\$308.95	\$7.45	2.47%
	3,000	\$369.75	\$379.25	\$9.50	2.57%
	3,500	\$438.00	\$449.55	\$11.55	2.64%
	4,000	\$506.25	\$519.85	\$13.60	2.69%
	5,000	\$642.75	\$660.45	\$17.70	2.75%
	6,000	\$779.25	\$801.05	\$21.80	2.80%
	7,000	\$915.75	\$941.65	\$25.90	2.83%
	8,000	\$1,052.25	\$1,082.25	\$30.00	2.85%
	9,000	\$1,188.75	\$1,222.85	\$34.10	2.87%
	10,000	\$1,325.25	\$1,363.45	\$38.20	2.88%
	20,000	\$2,690.25	\$2,769.45	\$79.20	2.94%
	30,000	\$4,055.25	\$4,175.45	\$120.20	2.96%
	40,000	\$5,420.25	\$5,581.45	\$161.20	2.97%