



# Charter Township of Chesterfield Department of Public Works

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## Understanding the New Water Rates

August 15, 2017

### The Rates That Were Passed

The new water and sewer rates went into effect on August 8, 2017. The new water and sewer rates are as follows (EMR = Equivalent Meter Ratio):

<u>Rate</u>	<u>Old Rate</u>	<u>New Rate</u>
Water – Commodity Charge	\$3.80	\$4.06
Water – Readiness-to-Serve Charge	\$8.00 fixed + \$12.50 x EMR	\$20.50 x EMR
Irrigation – Commodity Charge	\$3.88	\$4.14
Irrigation – Readiness-to-Serve Charge	\$8.00	\$8.00
Sewer – Commodity Charge	\$5.88	\$6.10
Sewer – Readiness-to-Serve Charge	\$7.00	\$10.44 x EMR

### How Rates Are Charged

**Commodity charges** are based on how much water that is used in a given quarter (three month period). If a resident uses 5,000 gallons of water in a quarter, all commodity charges are multiplied by a factor of 5, since the commodity charge is per thousand gallons of water.

**Readiness-to-Serve charges** are a fixed charge that is applied to water and sewer bills, no matter how much water is used.

### Residential Meters vs. Non-Residential Meters

When it comes to billing in the township, there are two types of meters: residential and non-residential. Residential meters pertain to residential homes, while non-residential meters pertain to meters that are not residential (i.e. commercial, industrial, and government entities).

## Residential Meters

Residential meters are calculated as explained in the “How Rates are Charged” section above. There is no equivalent meter ratio used for residential meters.

## Equivalent Meter Ratio for Non-Residential Meters

All non-residential meters will use an equivalent meter ratio to determine their water readiness-to-serve and sewer readiness-to-serve charges. The Equivalent Meter Ratio Chart is as follows:

<u>Non-Residential Meter Size</u>	<u>Equivalent Meter Ratio</u>
5/8"	1.0
3/4"	1.5
1"	2.5
1 1/2"	5.5
2"	8.0
3"	14.5
4"	20.0
6"	30.0
8"	50.0
10"	70.0

## What does this Equivalent Meter Ratio Chart Mean?

What this chart does is, based on a non-residential meter size, take the water readiness-to-serve charge and multiply it by its equivalent meter ratio. The calculation now determines the charges that will be applied to the water and sewer bill. **Here is an example of a business that has a 2" meter that uses zero gallons of water and that has no second water meter:**

Water – Commodity Charge	\$0.00	per thousand gallons
Water – Readiness-to-Serve Charge	\$164.00	(\$20.50 x 8.0 EMR)
Sewer – Commodity Charge	\$0.00	per thousand gallons
Sewer – Readiness-to-Serve Charge	<u>\$83.52</u>	(\$10.44 x 8.0 EMR)
<b>Total Water and Sewer Bill</b>	<b>\$247.52</b>	

## Proration of Water and Sewer Bills

The new water and sewer rates that went into effect will apply to future water and sewer bills, but will not apply to all of the water and sewer usage on those bills. Any water and sewer usage **before** August 8 will be charged the old water and sewer rates; any water and sewer

usage **after** August 8 will be charged the new water and sewer rates. There will be three billing periods where we will be prorating the water and sewer bills: September, October, and November, 2017.

### How are the Proration of Water and Sewer Bills Calculated?

The calculation of the proration of the water and sewer bills will use two things: the meter reading obtained at the beginning of the month and the total number of days in the billing period. If a resident or non-resident uses 10,000 gallons in a quarter, the 10,000 gallons will be divided by 90 days. The amount of days in the billing period before August 8, 2017, will be billed at the old rates; the amount of days in the billing period after August 8, 2017, will be billed at the new rates. Here are two examples:

#### **Example 1: Non-Residential Meter**

*September Meter Reading:*

Billing Period	7/1/17 – 9/30/17	<u>Meter Info:</u>	
Days in Billing Period	92 Days	Meter Type	Non-Residential
No. of Days: Before 8/8/17	37	Meter Size	2"
No. of Days: 8/8/17 and Beyond	55		
Meter Reading	10,000 Gallons		
Gallons Billed at Old Rate	4,000		
Gallons Billed at New Rate	6,000		

Water – Commodity Charge – Old Rate	\$15.20	(4,000 x \$3.80)
Water – Commodity Charge – New Rate	\$24.36	(6,000 x \$4.06)
Water – Readiness-to-Serve Charge – Old Rate	\$43.43	(((\$8.00 + (\$12.50 x 8.0 EMR)) / 92 x 37)
Water – Readiness-to-Serve Charge – New Rate	\$98.04	(((\$20.50 x 8.0 EMR) / 92 x 55)
Sewer – Commodity Charge – Old Rate	\$23.52	(4,000 x \$5.88)
Sewer – Commodity Charge – New Rate	\$36.60	(6,000 x \$6.10)
Sewer – Readiness-to-Serve Charge – Old Rate	\$2.82	(\$7.00 / 92 x 37)
Sewer – Readiness-to-Serve Charge – New Rate	<u>\$49.93</u>	(((\$10.44 x 8.0) / 92 x 55)
<b>Total Prorated Water and Sewer Bill</b>	<b>\$293.90</b>	

#### **Example 2: Residential Meter**

*September Meter Reading:*

Billing Period	7/1/17 – 9/30/17	<u>Meter Info:</u>	
Days in Billing Period	92 Days	Meter Type	Residential
No. of Days: Before 8/8/17	37	Meter Size	3/4"
No. of Days: 8/8/17 and Beyond	55		
Meter Reading	10,000 Gallons		
Gallons Billed at Old Rate	4,000		
Gallons Billed at New Rate	6,000		

Water – Commodity Charge – Old Rate	\$15.20	(4,000 x \$3.80)
Water – Commodity Charge – New Rate	\$24.36	(6,000 x \$4.06)
Water – Readiness-to-Serve Charge – Old Rate	\$8.24	(\$20.50 / 92 x 37)
Water – Readiness-to-Serve Charge – New Rate	\$12.26	(\$20.50 / 92 x 55)
Sewer – Commodity Charge – Old Rate	\$23.52	(4,000 x \$5.88)
Sewer – Commodity Charge – New Rate	\$36.60	(6,000 x \$6.10)
Sewer – Readiness-to-Serve Charge – Old Rate	\$2.82	(\$7.00 / 92 x 37)
Sewer – Readiness-to-Serve Charge – New Rate	<u>\$6.24</u>	(\$10.44 / 92 x 55)
<b>Total Prorated Water and Sewer Bill</b>	<b>\$129.24</b>	