

## Water, Wastewater and Infrastructure Rates – 2020/2021

### Recommendation

1. That the 2020 and 2021 water and wastewater rate changes, as outlined, be approved effective January 1 of each year.
2. That the 2020 and 2021 infrastructure rate change be approved effective January 1 of each year.
3. That the City Solicitor be requested to prepare the appropriate bylaws.

### Issue

This is to request approval for the proposed 2020 and 2021 water, wastewater, and Infrastructure Levy rates. The request supports the long-term strategies to reduce the gap in funding required to rehabilitate and maintain City of Saskatoon (City) infrastructure under the Strategic Goal of Asset and Financial Sustainability.

### Background

Rate increases for water, wastewater, and the Infrastructure Levy are designed to cover all operating costs, fund current and future capital requirements, and provide a return on investment (ROI) to the City. Rates are designed using an inclining block strategy to promote conservation for residential customers and a uniform rate structure for commercial properties.

The rate structure consists of the following components:

- Water volumetric charges;
- Water service charge – fixed charge based on water meter size;
- Wastewater volumetric charges;
- Wastewater service charge – fixed charge based on water meter size;
- Wastewater volumetric surcharge – where applicable, commercial customers are surcharged for extra strength wastewater discharged to the collection system; and
- Infrastructure Levy – a volumetric charge for the capital replacement of the water distribution and wastewater collection systems.

### Discussion/Analysis

In order to meet the current and future needs of the City and customers, an overall average rate increase of 4.1% is being requested in 2020 and 3.9% in 2021.

In 2020, there will be an estimated 74,000 water meters, of which, 92% are residential and 8% are commercial. Volumetric sales are expected to be consistent from prior years as increases realized from population growth have been offset by conservation. Revenues realized from the proposed rate increase will be used to offset increases in operating costs, to fund capital improvements and to support an ROI to the City. Capital budget requests for water and wastewater treatment are a combined \$151.3 million in the 2020 and 2021 budget years. Revenues realized from the Infrastructure Levy support the proposed capital spending plan of \$57.7 million over the next two years for the water distribution and sewer collection systems. The final year of the five-year phase-in plan to establish the ROI to the City is 2020. Beginning in 2021, ROI will be based upon 10% of metered revenues, including the Infrastructure Levy.

Conservation orientated rates continue to be proposed for 2020 and 2021, originally introduced in 2007. The City's rate structure for residential customers is an inclining block structure, which encourages conservation through higher rates with higher water usage. While conservation remains in the best interest of the City and its citizens, conservation does create a risk for the utility of not realizing sufficient revenue to adequately fund on-going operating requirements and capital programs. For commercial customers, a uniform rate structure continues to be proposed with each unit of water charged at the same rate, regardless of overall usage. The City fully transitioned to this rate structure in 2015. Industry standards do not favour the use of an inclining block structure for commercial customers so that customers are not penalized due to the nature of their business.

The proposed Infrastructure Levy rate is based on a uniform rate structure for both residential and commercial customers in both 2020 and 2021.

To address affordability, the proposed rate increase realizes lower increases in the rate tiers identified as required for basic human needs, compared to those identified as discretionary usage. For example, in 2020, an average residential customer with a 15mm (5/8") water meter and 25.5 cubic meters (900 cubic feet) consumption will see an increase of \$4.72 (4.1%) on their monthly bill. A residential customer with the same meter size and a water usage of 17.0 cubic meters (600 cubic feet), which is considered the top of the basic human needs tier, would realize a monthly increase of \$3.17 (3.8%).

Table 1 below shows a comparison of the residential volumetric increases.

	2019	2020	Increase
First 600 cubic feet	\$ 9.758	\$ 10.149	\$ 0.39
Next 600 cubic feet	\$ 10.506	\$ 11.025	\$ 0.52
Over 1200 cubic feet	\$ 12.829	\$ 13.483	\$ 0.65

Table 2 shows the commercial combined volumetric rate.

	2019	2020
All Volumes	9.113	9.514

Table 3 below shows a comparison of utility bill with other comparable prairie cities.

Meter Size	5/8"(15mm)	3/4"(20mm)	3"(75mm)
Monthly Consumption	25.5 m <sup>3</sup> (900 ft <sup>3</sup> )	85 m <sup>3</sup> (3,000 ft <sup>3</sup> )	1416 m <sup>3</sup> (50,000 ft <sup>3</sup> )
Customer Type	Residential	Commercial	Commercial
Saskatoon (2020)	\$118.57	\$381.71	\$6,233.29
Calgary(2020)	\$122.74	\$340.70	\$4,699.85
Edmonton (2019)	\$125.51	\$332.75	\$4,965.69
Winnipeg (2019)	\$134.31	\$409.80	\$6,613.62
Regina (2019)	\$137.09	\$360.22	\$5,656.33

At its meeting on October 28, 2019, City Council approved the creation of a new reseller rate for regional customers. The Administration's report indicated that:

“the new reseller rate for 2020 and 2021 be ‘frozen’ at the rate paid by SaskWater in 2019. Following the completion of the 2020-21 rate cycle, the reseller rate will be re-evaluated and the next rate cycle will be recalculated for approval by Council.

It is important to note that the effect of a rate freeze does not result in a lower water rate for customers outside Saskatoon. In addition to the Saskatoon water costs, all other water customers must pay a local water rate to their municipality to cover the costs of distribution, a local connection cost, and also pay any applicable costs charged by SaskWater. In all municipalities outside Saskatoon, water customers will continue to have higher water rates than customers within Saskatoon.”

The newly implemented proposed reseller rate for 2020 and 2021 is included on page 9, (Table V).

### Service Charges

**Wastewater Surcharge** – The commercial volumetric wastewater charges are surcharged based on the wastewater strength in excess of the allowable loadings of biological oxygen demand, total suspended solids, grease, and phosphorous. Various budget cost components of the treatment process are applied to treating the extra strength wastewater, and the formula is adjusted periodically to ensure full cost recovery – see pages 5 and 6 (Table II) and pages 8 and 9 (Table IV).

In order for the surcharge to function as a cost recovery tool and to provide effective protection of the treatment process and the collection system, rates are designed to reflect increased costs of treatment.

**Liquid Waste Hauler Charge** – The liquid waste hauler charge is a direct charge per 1,000 gallons to companies that truck liquid wastes directly to the Wastewater Treatment Plant or Marquis Waste Haulers Station. This charge is currently \$66.44 per 1,000 gallons. It is proposed the rate be increased to \$67.67 per 1,000 gallons in 2020, and \$69.13 per 1,000 gallons in 2021 to offset cost required to meet stringent regulations in disposal of grit material – see pages 5 and 6 (Table II) and pages 8 and 9 (Table IV). The rate increase will provide additional annual average cost recovery of 2% and 2.16%, respectively.

**Heavy Grit Facility Charge** – The Heavy Grit Facility charge is also a direct charge per 1,000 gallons to companies that truck liquid wastes with heavy grit directly to the Heavy Grit Facility or Marquis Waste Haulers Station. This charge is currently \$95.00 per 1,000 gallons. It is proposed that the rate be increased to \$96.90 per 1,000 gallons.

**Water Meter Shop Service Charge Adjustments** – The Water Meter Shop provides a variety of services related to meter installation, service connections, and meter testing. Adjustments are required to ensure cost recovery – see page 10 (Table VII).

### **Policy Implications:**

The revision of rates would require an amendment to the appropriate bylaws.

### Financial Implications:

The proposed rate increase to the water, wastewater, and Infrastructure Levy rates in 2020 and 2021 is expected to generate a revenue increase of \$5.46 million and \$6.67 million, respectively, to ensure the utility is fully cost recovered.

When setting rates, affordability of water and wastewater services is considered. The three tiers in the residential rate structure distinguish between basic human need consumption and discretionary spending consumption. The proposed rates are within the recommended maximum ratios based on the median household income in Saskatoon.

There are no legal or environmental implications identified.

See below tables for the current and proposed rate charges.

**Table I: Water Rates – 2020**

<b>Service Charges (\$/month)</b>	<b>RESIDENTIAL</b>	
<b>Meter Size</b>	<b>2019</b>	<b>2020</b>
5/8" (15mm)	\$11.89	\$ 12.30
3/4" (20mm)	\$17.84	\$ 18.45
1" (25mm)	\$35.67	\$ 36.90
1 ½"(40mm)	\$71.34	\$ 73.80
2" (50mm)	\$118.90	\$ 123.00
<b>Volumetric Charges (\$/month)</b>	<b>\$/100 ft<sup>3</sup></b>	<b>\$/100 ft<sup>3</sup></b>
First 600 cu.ft./ First 17 m3	4.376	\$4.539
Next 600 cu.ft./ Next 17 m3	4.873	\$5.116
Greater than 1,200 cu.ft./ Greater Than 34 m3	6.416	\$6.736

<b>Service Charges (\$/month)</b>	<b>COMMERCIAL</b>	
<b>Meter Size</b>	<b>2019</b>	<b>2020</b>
5/8" (15mm)	\$30.97	\$ 32.09
3/4" (20mm)	\$46.46	\$ 48.14
1" (25mm)	\$92.91	\$ 96.27
1 ½"(40mm)	\$185.82	\$ 192.54
2" (50mm)	\$309.70	\$ 320.90
3" (75mm)	\$712.31	\$ 738.07
4" (100mm)	\$1,269.77	\$1,315.69
6" (150mm)	\$2,849.24	\$2,952.28
8" (200mm)	\$5,079.08	\$5,262.76
10" (250mm)	\$7,928.32	\$8,215.04
<b>Volumetric Charges (\$/month)</b>	<b>\$/100 ft<sup>3</sup></b>	<b>\$/100 ft<sup>3</sup></b>
All Volumes	3.631	\$3.785

**Table II: Wastewater Rates – 2020**

Service Charges (\$/month)	RESIDENTIAL	
Meter Size	2019	2020
5/8" (15mm)	\$11.89	\$ 12.30
3/4" (20mm)	\$17.84	\$ 18.45
1" (25mm)	\$35.67	\$ 36.90
1 ½"(40mm)	\$71.34	\$ 73.80
2" (50mm)	\$118.90	\$ 123.00
Volumetric Charges (\$/month)	\$/100 ft <sup>3</sup>	\$/100 ft <sup>3</sup>
First 17m <sup>3</sup> (600 ft <sup>3</sup> )	\$2.213	\$2.349
Next 17m <sup>3</sup> (600 ft <sup>3</sup> )	\$2.464	\$2.648
Greater than 34m <sup>3</sup> (1200 ft <sup>3</sup> )	\$3.244	\$3.486
Service Charges (\$/month)	COMMERCIAL	
Meter Size	2019	2020
5/8" (15mm)	\$30.97	\$ 32.09
3/4" (20mm)	\$46.46	\$ 48.14
1" (25mm)	\$92.91	\$ 96.27
1 ½"(40mm)	\$185.82	\$ 192.54
2" (50mm)	\$309.70	\$ 320.90
3" (75mm)	\$712.31	\$ 738.07
4" (100mm)	\$1,269.77	\$1,315.69
6" (150mm)	\$2,849.24	\$2,952.28
8" (200mm)	\$5,079.08	\$5,262.76
10" (250mm)	\$7,928.32	\$8,215.04
Volumetric Charges (\$/month)	\$/100 ft <sup>3</sup>	\$/100 ft <sup>3</sup>
All Volumes	\$2.851	\$3.022

**WASTEWATER SURCHARGE (¢/100 ft<sup>3</sup> water)**

**Proposed Formula (2020)**

$$23 \left( \frac{X}{300} \right) + 24.6 \left( \frac{Y}{300} \right) + 24 \left( \frac{Z}{100} \right) + 23.5 \left( \frac{P}{10} \right)$$

- X = BOD units greater than 300
- Y = Suspended Solids units greater than 300
- Z = Grease units greater than 100
- P = Phosphorous units greater than 10

<b>LIQUID WASTE HAULER CHARGE</b>	
<b>Current (2019)</b>	
Industrial/Commercial & Septic Wastes	\$66.44 per 1,000 gallons
<b>Proposed (2020)</b>	
Industrial, Commercial & Septic Wastes	\$67.67 per 1,000 gallons
<b>HEAVY GRIT FACILITY HAULER CHARGE</b>	
<b>Current (2019)</b>	
Industrial/Commercial & Septic Wastes	\$95.00 per 1,000 gallons
<b>Proposed (2020)</b>	
Industrial, Commercial & Septic Wastes	\$96.90 per 1,000 gallons

**Table III: Water Rates – 2021**

Service Charges (\$/month)	RESIDENTIAL		Commercial	
	2020	2021	2020	2021
<b>Meter Size</b>				
5/8" (15mm)	\$ 12.30	\$ 12.58	\$ 32.09	\$ 32.30
3/4" (20mm)	\$ 18.45	\$ 18.87	\$ 48.14	\$ 48.45
1" (25mm)	\$ 36.90	\$ 37.74	\$ 96.27	\$ 96.90
1 ½"(40mm)	\$ 73.80	\$ 75.48	\$ 192.54	\$ 193.80
2" (50mm)	\$ 123.00	\$ 125.80	\$ 320.90	\$ 323.00
3" (75mm)			\$ 738.07	\$ 742.90
4" (100mm)			\$1,315.69	\$1,324.30
6" (150mm)			\$2,952.28	\$2,971.60
8" (200mm)			\$5,262.76	\$5,297.20
10" (250mm)			\$8,215.04	\$8,268.80
<b>Volumetric Charges (\$/100 ft<sup>3</sup> /month)</b>				
First 17m <sup>3</sup> (600 ft <sup>3</sup> )	\$4.539	\$4.700		
Next 17m <sup>3</sup> (600 ft <sup>3</sup> )	\$5.116	\$5.297		
Greater than 34m <sup>3</sup> (1200 ft <sup>3</sup> )	\$6.736	\$6.975		
All Volumes			\$3.785	\$3.919

**Table IV: Wastewater Rates - 2021**

Service Charges (\$/month)	RESIDENTIAL		COMMERCIAL	
	Meter Size	2020	2021	2020
5/8" (15mm)	\$ 12.30	\$ 12.58	\$ 32.09	\$ 32.30
3/4" (20mm)	\$ 18.45	\$ 18.87	\$ 48.14	\$ 48.45
1" (25mm)	\$ 36.90	\$ 37.74	\$ 96.27	\$ 96.90
1 ½"(40mm)	\$ 73.80	\$ 75.48	\$ 192.54	\$ 193.80
2" (50mm)	\$ 123.00	\$ 125.80	\$ 320.90	\$ 323.00
3" (75mm)			\$ 738.07	\$ 742.90
4" (100mm)			\$1,315.69	\$1,324.30
6" (150mm)			\$2,952.28	\$2,971.60
8" (200mm)			\$5,262.76	\$5,297.20
10" (250mm)			\$8,215.04	\$8,268.80
<b>Volumetric Charges (\$/m<sup>3</sup>/month)</b>				
First 17m <sup>3</sup> (600 ft <sup>3</sup> )	\$2.349	\$2.435		
Next 17m <sup>3</sup> (600 ft <sup>3</sup> )	\$2.648	\$2.744		
Greater than 34m <sup>3</sup> (1200 ft <sup>3</sup> )	\$3.486	\$3.613		
All Volumes			\$3.022	\$3.131

**WASTEWATER SURCHARGE (¢/100 ft<sup>3</sup> water)**

**Proposed Formula (2021)**

$$23.5 \left( \frac{X}{300} \right) + 25.1 \left( \frac{Y}{300} \right) + 24.5 \left( \frac{Z}{100} \right) + 24 \left( \frac{P}{10} \right)$$

- X = BOD units greater than 300
- Y = Suspended Solids units greater than 300
- Z = Grease units greater than 100
- P = Phosphorous units greater than 10

**LIQUID WASTE HAULER CHARGE**

**Proposed (2020)**

Industrial, Commercial & Septic Wastes \$67.67 per 1,000 gallons

**Proposed (2021)**

Industrial, Commercial & Septic Wastes \$69.13 per 1,000 gallons (approximately

**HEAVY GRIT FACILITY HAULER CHARGE**

**Proposed (2020)**

Industrial/Commercial & Septic Wastes \$96.90 per 1,000 gallons

**Proposed (2021)**

Industrial, Commercial & Septic Wastes \$98.99 per 1,000 gallons

**Table V: Reseller Rates**

	<b>\$/100 ft<sup>3</sup>/month</b>		
	<b>2019</b>	<b>2020</b>	<b>2021</b>
All Volumes	\$7.495	\$7.495	\$7.495

**Table VI: Infrastructure Rates 2020, 2021**

<b>Infrastructure Levy</b>	<b>Residential</b>			<b>Commercial</b>		
	<b>\$/100 ft<sup>3</sup>/month</b>			<b>\$/100 ft<sup>3</sup>/month</b>		
	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
All Volumes	\$3.169	\$3.261	\$3.522	\$2.631	\$2.707	\$2.924

**Table VII: Water Meter Shop - Service Charge Adjustments 2020, 2021  
(Part of Schedule C in the Bylaw)**

<b>Service Item</b>	<b>Meters</b>	<b>Current</b>	<b>2020 Proposed</b>	<b>2021 Proposed</b>
Application Fee		\$30.00	\$30.00	\$30.00
Service Connect for Arrears		\$80.00	\$80.00	\$80.00
Removal, re-installation, turn on or off of curb stop valve of Service Meters (Not for demolition of building)	15 mm to 25 mm (5/8" to 1") meter	\$80.00	\$80.00	\$80.00
	40 mm (1 1/2") and larger meter	\$120.00	\$120.00	\$120.00
Customer Requested Meter Testing – If found to be accurate	15 mm to 25mm (5/8" to 1") meter	\$70.00	\$70.00	\$70.00
	40mm (1 1/2") meter	\$95.00	\$95.00	\$95.00
	50 mm (2") meter	\$125.00	\$125.00	\$125.00
Repair of Damaged, Frozen or Stolen Meter	5/8" (15 mm)	\$100.00	\$110.00	\$115.00
	3/4" (20 mm)	\$150.00	\$150.00	\$150.00
	1" (25 mm)	\$205.00	\$205.00	\$205.00