

# Water Utility Rate Considerations

Council Meeting  
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# Strategic Direction on Water

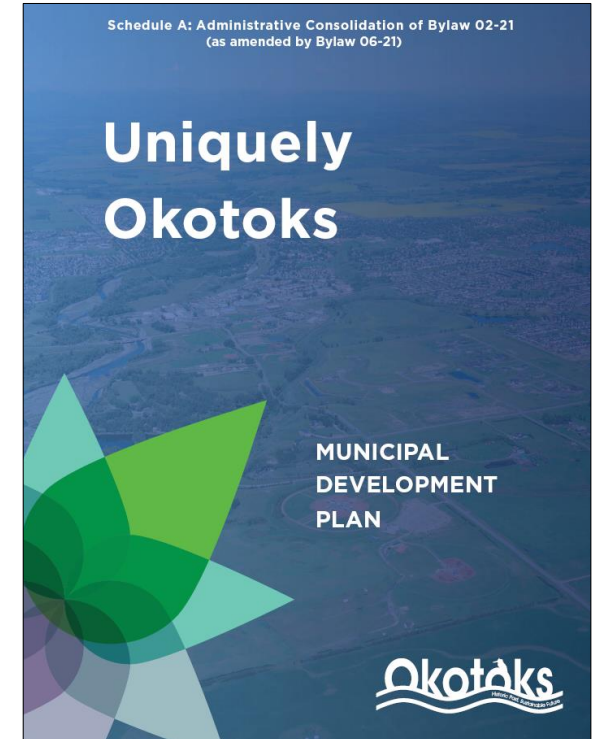
## Municipal Development Plan

### Goal = Sustainable Water

- Okotoks uses an end-to-end, watershed lens to protect and conserve our water while preparing for weather and climate change impacts.

### Sample Policy

- 4.2.1 a) Increase water conservation strategies,
- 4.2.1 g) Develop an aggressive peak water demand reduction program.

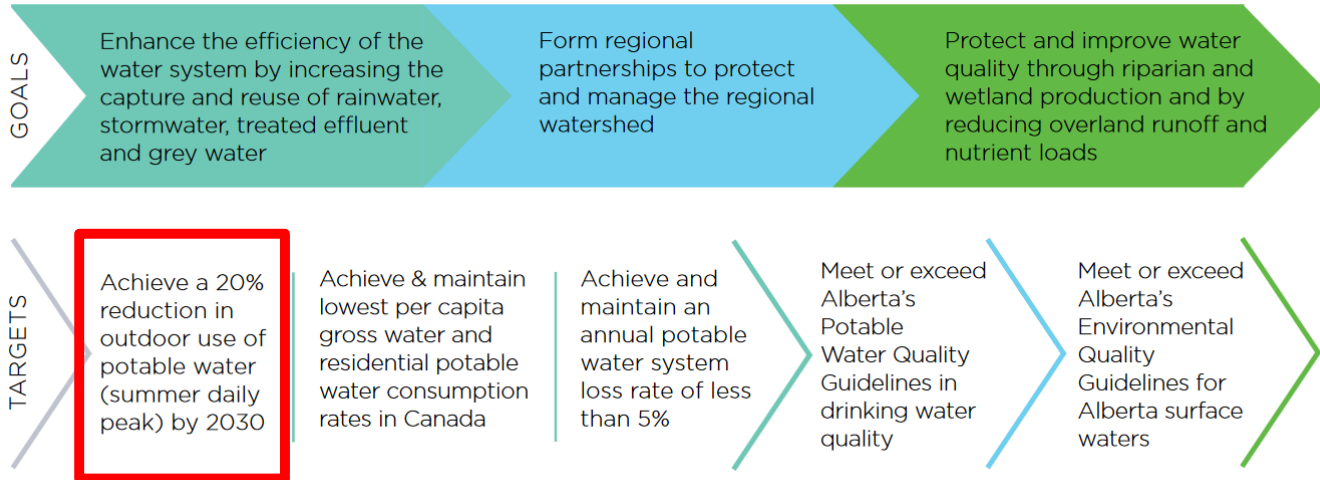


\*Complete details available in the Okotoks Municipal Development Plan

# Strategic Direction on Water

## Environmental Master Plan

**5** Goal 5: Reduce water demand and consumption of drinking water and improve the water quality of our watershed



\*Complete details available in the Okotoks Environmental Master Plan

Utility Rate Structures changes are one Tool that can be used to encourage conservation.

## Water Management and Conservation Tools:

- Water Allocation Policy
- Water Bylaw and **Utility Structure**
- Water Shortage Response Plan
- Capital and Operating Projects
  - Water Conservation
  - Process Optimization
- Water Conservation Programs and Rebates
- Governance/Policy Direction
  - Municipal Development Plan
  - Climate Action Plan
  - Environmental Master Plan

# Water Bylaw and WSRP – Previous 2024 Updates

## Outdoor Watering Schedule

WATER CONSERVATION STAGE	DAYS 	ADDRESS 	TIME *Select one watering option only	
			 MANUAL	 AUTOMATED
1 & 2	Mon & Thurs	ODD #	6-8 AM or 8-10 PM	<b>OR</b> 2-4 AM
1 & 2	Tues & Fri	EVEN #	6-8 AM or 8-10 PM	<b>OR</b> 2-4 AM
3	Mon	ODD #	6-8 AM or 8-10 PM	<b>OR</b> 2-4 AM
	Fri	EVEN #	6-8 AM or 8-10 PM	<b>OR</b> 2-4 AM
4 & 5	Outdoor Watering Prohibited			

**NOTE:** Hand watering flowers, vegetable gardens, trees and shrubs using a container or hose with a manual trigger nozzle may be done at anytime in Stages 1-3, or from 8 PM - 8 AM in Stage 4.

# STAGE 5

## Essential Use Only

*Non-essential water use prohibited*



# 2023 Residential Single Family Water Usage in cubic meters

Column1	Jan - Feb	Mar - Apr	May - Jun	Jul - Aug	Sep - Oct	Nov - Dec	Annual Total
5 <sup>th</sup> Percentile	6	6	8	8	8	6	42
10 <sup>th</sup> Percentile	10	9	13	12	11	10	65
25 <sup>th</sup> Percentile	16	15	21	20	18	16	106
50 <sup>th</sup> Percentile	24	23	31	31	27	23	159
75 <sup>th</sup> Percentile	34	32	44	46	39	33	228
90 <sup>th</sup> Percentile	46	42	61	67	54	44	314
95 <sup>th</sup> Percentile	53	50	73	81	65	52	374
Highest User	58	82	227	331	190	98	987

# Percentage of 2023 Residential Single Family water used up to each percentile of account holders

	Jan - Feb	Mar - Apr	May - Jun	Jul - Aug	Sep - Oct	Nov - Dec	Annual Average
5 <sup>th</sup> Percentile	1%	1%	1%	1%	1%	1%	1%
10 <sup>th</sup> Percentile	2%	2%	3%	2%	2%	3%	2%
25 <sup>th</sup> Percentile	9%	10%	10%	9%	10%	11%	10%
50 <sup>th</sup> Percentile	28%	30%	28%	27%	29%	28%	28%
75 <sup>th</sup> Percentile	56%	56%	56%	52%	54%	56%	55%
90 <sup>th</sup> Percentile	79%	77%	77%	75%	77%	78%	77%
95 <sup>th</sup> Percentile	87%	87%	87%	85%	86%	87%	86%

# 2024 Comparison of Municipal Rates

**Municipal Comparison - Base Rate  
(Based on Bi-Monthly Billing period)**

Municipality	Water	Wastewater	Total	Difference
HIGH RIVER	\$ 21	\$ 19	\$ 40	-15%
OKOTOKS	\$ 23	\$ 23	\$ 47	0%
COCHRANE	\$ 28	\$ 40	\$ 67	44%
CALGARY	\$ 27	\$ 51	\$ 78	66%
DIAMOND VALLEY	\$ 45	\$ 45	\$ 90	93%
CHESTERMERE	\$ 52	\$ 75	\$ 127	172%
CANMORE	\$ 52	\$ 88	\$ 140	199%
AIRDRIE	\$ 49	\$ 98	\$ 147	216%
STRATHMORE	\$ 97	\$ 117	\$ 214	358%

**Municipal Comparison ~ 75th Percentile Bill  
(Based on 38 m3/bi-monthly billing period)**

Municipality	Water	Wastewater	Total	Difference
HIGH RIVER	\$ 61	\$ 99	\$ 160	-22%
CALGARY	\$ 83	\$ 115	\$ 197	-4%
OKOTOKS	\$ 94	\$ 111	\$ 205	0%
COCHRANE	\$ 84	\$ 133	\$ 217	6%
CHESTERMERE	\$ 123	\$ 96	\$ 219	7%
CANMORE	\$ 98	\$ 166	\$ 264	29%
DIAMOND VALLEY	\$ 138	\$ 138	\$ 277	35%
AIRDRIE	\$ 106	\$ 177	\$ 283	38%
STRATHMORE	\$ 209	\$ 204	\$ 413	102%

**Municipal Comparison ~ 50th Percentile Bill  
(Based on 27 m3/bi-monthly billing period)**

Municipality	Water	Wastewater	Total	Difference
HIGH RIVER	\$ 47	\$ 76	\$ 123	-21%
OKOTOKS	\$ 71	\$ 85	\$ 156	0%
CALGARY	\$ 66	\$ 96	\$ 163	4%
COCHRANE	\$ 64	\$ 106	\$ 170	9%
CHESTERMERE	\$ 96	\$ 96	\$ 192	23%
DIAMOND VALLEY	\$ 111	\$ 111	\$ 223	43%
CANMORE	\$ 84	\$ 144	\$ 228	46%
AIRDRIE	\$ 90	\$ 154	\$ 244	56%
STRATHMORE	\$ 176	\$ 179	\$ 355	127%

**Municipal Comparison ~ 95th Percentile Bill  
(Based on 62 m3/bi-monthly billing period)**

Municipality	Water	Wastewater	Total	Difference
HIGH RIVER	\$ 97	\$ 149	\$ 246	-26%
CALGARY	\$ 118	\$ 155	\$ 273	-18%
CHESTERMERE	\$ 182	\$ 96	\$ 278	-16%
COCHRANE	\$ 134	\$ 192	\$ 326	-2%
OKOTOKS	\$ 167	\$ 166	\$ 333	0%
CANMORE	\$ 130	\$ 222	\$ 352	6%
AIRDRIE	\$ 142	\$ 227	\$ 369	11%
DIAMOND VALLEY	\$ 197	\$ 197	\$ 395	19%
STRATHMORE	\$ 280	\$ 259	\$ 539	62%



# Utility Rate Structure – Tier 3 Rates

- Okotoks bills water on a progressive block structure to encourage conservation and discourage excessive use. Current block rate targets are outlined below.
- Tier 3 rates could be adjusted to add additional financial disincentive higher water consumption.

**Percentage of 2023 water billed to each tier**

	Jan - Feb	Mar - Apr	May - Jun	Jul - Aug	Sep - Oct	Nov - Dec	Annual Total
Tier 1	71%	74%	58%	56%	64%	73%	65%
Tier 2	24%	21%	29%	28%	26%	22%	26%
Tier 3	5%	5%	12%	16%	10%	5%	9%

# Utility Rate Structure – Tier 3 Rates

- Administration is proposing to use additional projected revenue from increased Tier 3 Rates to offset consumption inflationary rate increases to other Tiers (Affordability objective)

	2024 Rate	2025 Proposed Rate (Base Case)		2025 Proposed Rate (Increase Tier 3 to \$5.10)		Difference
Base Residential	\$ 23.40	\$ 24.20	3%	\$ 24.20	3%	0%
Residential Consumption Charge						
Tier 1 (<23 m3)	\$ 1.70	\$ 1.75	3%	\$ 1.70	0%	-3%
Tier 2 (24-46 m3)	\$ 2.10	\$ 2.15	2%	\$ 2.10	0%	-2%
Tier 3 (>46 m3)	\$ 3.50	\$ 3.60	3%	\$ 5.10	46%	42%
Non- Residential Consumption						
	\$ 1.90	\$ 1.95	3%	\$ 1.90	0%	-3%

# Ratepayer Impacts of Proposed Tier 3 Adjustments

Annual estimated Cost of Water  
Assuming 2025 rates and 2023 Usage Patterns

	Base Scenario Tier 3 (\$3.60)	Tier 3 (~3X) (\$5.10)	Diff %
5 <sup>th</sup> Percentile	\$ 219	\$ 217	-1%
10 <sup>th</sup> Percentile	\$ 259	\$ 256	-1%
25 <sup>th</sup> Percentile	\$ 331	\$ 325	-2%
50 <sup>th</sup> Percentile	\$ 432	\$ 424	-2%
75 <sup>th</sup> Percentile	\$ 580	\$ 569	-2%
90 <sup>th</sup> Percentile	\$ 829	\$ 881	6%
95 <sup>th</sup> Percentile	\$ 1,036	\$ 1,169	13%
Highest User	\$ 3,242	\$ 4,294	32%

- **In comparison to the 2025 base rate scenario. 75% of Okotoks Residents could expect to see a marginal (1-2%) bill reduction.**
- The top 5% of water users could expect their bill to increase by 13-32% if consumption patterns are not improved.
- Expected to be near revenue neutral, but the utility could be financially impacted by reduced consumption patterns. >70% of all water utility revenue is obtained via variable charges.

# Utility Rate Structure – Sanitary Billing

- Not all water that enters the water distribution network returns to the sanitary system. When billing for sanitary there are options to account for the delta in water vs. sanitary consumption.
- The current methodology bills the average winter usage during summer time so that sanitary charges are not billed on irrigation water. An Alternate method is to bill sanitary as a factor of water consumption year round.
- Administration is proposing to use additional projected revenue from eliminating the summer sanitary discount to offset consumption inflationary rate increases to other Tiers (Affordability objective)

	2024 Rate	2025 Proposed Rate (Base Case)		2025 Proposed Rate (Bill sanitary consumption at .9)		Difference
Base Residential	\$ 23.25	\$ 24.25	4%	\$ 24.25	4%	0%
Consumption Charge	\$ 2.30	\$ 2.40	4%	\$ 2.30	0%	-4%

# Impacts of Changing Sanitary Billing Methodology

Annual estimated Cost of Sanitary  
Assuming 2025 rates and 2023 Usage Patterns

	Base Scenario Summer Discount	0.9 Multiplier Applied year round	Diff %
5th Percentile	\$ 232	\$ 232	0%
10th Percentile	\$ 285	\$ 280	-2%
25th Percentile	\$ 371	\$ 365	-2%
50th Percentile	\$ 482	\$ 475	-1%
75th Percentile	\$ 621	\$ 617	-1%
90th Percentile	\$ 779	\$ 795	2%
95th Percentile	\$ 890	\$ 920	3%
Highest User	\$ 1,293	\$ 2,188	69%

- In comparison to the 2025 base rate scenario. 75% of Okotoks Residents could expect to see a marginal (0-2%) bill reduction.
- A key advantage of charging the 0.9 multiplier year round is that heavy irrigators are not given a “discount” on irrigation water. Our infrastructure is sized for peak day and the water system is most challenged during hot summers.
- The top 5% of water users could expect their bill to increase by 3-69% if consumption patterns are not improved.
- Expected to be near revenue neutral, but the utility could be financially impacted by reduced consumption patterns. >70% of all water utility revenue is obtained via variable charges.

# Summary

## Proposed service level changes:

- Proposed Changes to the Utility Rate Structure:
  - Increase the cost of Tier 3 water to approximately 3x the rate for Tier 1 water
  - Change Methodology for the application of wastewater charges to bill sanitary at 0.9 x metered water