

Water Use, Restrictions & Savings: Pickering Lawn Irrigation Analysis

Durham Region's 2025/26 water rates, the mandatory odd-even watering rules that apply every summer, and a seasonal savings model for typical Pickering lawns

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COVERAGE	City of Pickering, Regional Municipality of Durham, Ontario
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Artificial Grass Pickering Research publishes data-driven local studies on residential landscaping, water use and outdoor surfaces in Pickering and the Greater Toronto Area. This report is provided free for information purposes.

ABSTRACT

This report assembles the Regional Municipality of Durham's published water and sewer rates — most recently amended by By-law 2025-054 effective January 1, 2026 — the mandatory odd-even watering rules that apply in Pickering every summer under Water System By-law 89-2003, and published outdoor-use statistics, then models how much water a typical Pickering lawn consumes across a growing season and what eliminating that irrigation is worth. Every input is drawn from a cited public source; every modelling assumption is stated where it is used.

We find that irrigating a 500 sq ft lawn through a 24-week season uses about **27.9 m³ of treated Lake Ontario water (roughly \$106 at Durham's estimated 2026 combined rates)**; that Pickering operates under a **standing mandatory odd-even watering bylaw every May through September** — unlike most GTA municipalities — with stricter emergency bans possible, as North Durham experienced in summer 2025; and that the honest cash case is moderate, because **about \$399 of a typical annual bill is fixed charges** no lawn decision can touch.

KEY FINDINGS AT A GLANCE

≈\$3.79/m³

combined water + sewer
marginal cost, Durham
2026 estimate

27.9 m³

modelled seasonal
irrigation for a 500 sq ft
lawn (24 weeks)

\$106/yr

water + sewer cost of that
irrigation at 2026 rates

odd-even

mandatory bylaw watering
rule, May–Sept every year

Contents

- 1 Pickering's water system and the 2025/26 rate structure
- 2 Outdoor watering rules: a standing odd-even bylaw
- 3 How much water a lawn actually uses
- 4 The savings model for a typical Pickering lawn
- 5 Drought summers and restriction-proofing
- M Methodology, limitations and references

1 Pickering's water system and the 2025/26 rate structure

Pickering's drinking water comes from Lake Ontario, treated at the Ajax Water Supply Plant serving the western Durham lakeshore; all wastewater is treated at the Duffin Creek Water Pollution Control Plant on the city's shoreline, a 630-million-litre per day facility jointly owned by York and Durham Regions [1][2]. Water and sewer charges arrive on one Region of Durham bill through MyDurhamWater — the City of Pickering does not bill water directly — and the system is fully user-pay, with no property-tax funding [3].

The 2025 residential rate schedule (Water System By-law 89-2003, amended by By-law 2025-054) sets the first-block water rate at **\$1.358/m³** (0–45 m³/month block) and sanitary sewer at **\$2.251/m³**, giving a combined volumetric rate of **\$3.609/m³** [1]. Monthly basic charges total \$31.65 (\$22.81 water + \$8.84 sewer) — \$379.80 per year in fixed costs before any tap is opened. Durham Regional Council approved a further **5% combined increase effective January 1, 2026**, adding about \$5.24/month for an average household; per-m³ 2026 figures were not separately published, so this report estimates 2026 combined rates at roughly **\$3.79/m³** and fixed charges at **\$399/year** [2][3].

Table 1 — Components of a Pickering residential water bill. Sources: [1][2][3].

Component	Basis	2025 charge	2026 est.
Water, first block	0–45 m ³ per month	\$1.358/m ³	≈\$1.43/m ³
Sanitary sewer	metered water use	\$2.251/m ³	≈\$2.36/m ³
Combined volumetric	water + sewer	\$3.609/m ³	≈\$3.79/m ³
Fixed charges, annualized	water + sewer basic monthly	\$379.80/yr	≈\$399/yr

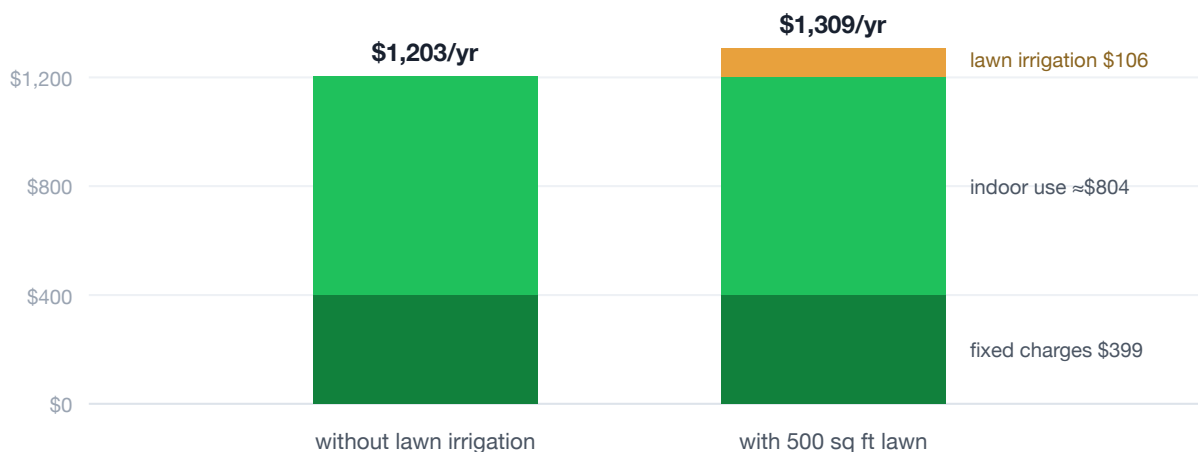


Figure 1 — Anatomy of a Pickering water bill at estimated 2026 rates. Only the amber segment changes when a lawn stops being watered. Derived from [1][2][3]; assumptions in \$/M.

2 Outdoor watering rules: a standing odd-even bylaw

Unlike most GTA municipalities, Pickering operates under a **mandatory odd-even lawn-watering bylaw every year from May through September**. Under Water System By-law 89-2003, odd-numbered addresses may water only on odd calendar days, even-numbered addresses only on even days; the Region caps application at 2.5 cm (1 inch) per week including rainfall [4]. The rule is not drought-contingent — it applies every summer as a standing condition of connection.

The Region retains power to impose stricter bans during extreme heat or low supply. In summer 2025, it did: North Durham communities (Beaverton, Cannington, Sunderland, Uxbridge, Port Perry) were placed under **mandatory water restrictions** beyond odd-even scheduling, though Lake Ontario-supplied Pickering was not included [5].

LOCAL CONTEXT — BY-LAW 89-2003 AT A GLANCE

Odd addresses water on odd days; even on even days; May through September, every year. A natural lawn either complies with the schedule or its owner risks enforcement; an artificial lawn needs no exemption and generates no compliance risk.

3 How much water a lawn actually uses

The U.S. EPA's WaterSense program puts outdoor use at **more than 30% of average household consumption**, and estimates that **as much as 50% of outdoor water is lost to wind, evaporation and runoff** — water that in Pickering is treated at the Ajax plant, pumped, metered, billed, and never reaches a root [6]. Statistics Canada data cited by the Ontario Water Works Association reports that 61% of Ontario homeowners irrigate their lawns; the 10% with automatic systems apply an average of 95 mm of water per week versus just 7 mm for the 90% watering manually [7].

For a seasonal model, this report applies the widely used guideline of 2.5 cm of water per week across a 24-week southern Ontario growing season — a stated assumption, not a measurement (\$M). That is 60 cm per season, or **0.6 m³ per square metre**. Applied to the reference 500 sq ft (46.5 m²) backyard, the model yields 27.9 m³ per season.

Pickering's climate softens but does not remove the need. The nearest ECCC station (Oshawa WPCP, ~15 km east) records 871.9 mm of annual precipitation, well distributed, with July's average high of 25.1 °C driving evaporation between storms [8]. Summer rain arrives in intense bursts — on July 16, 2024, Environment Canada put Pickering and neighbours under severe weather warnings for flash floods [9] — much of which runs off rather than soaking in. The Region of Waterloo's published data suggests that summer outdoor water use can increase household consumption by up to 50% in peak months [7], and the OWWA manual notes that automatic irrigation systems apply roughly 14 times as much water per week as manual watering — a gap that explains why some Pickering households' water bills spike dramatically each July while their neighbours' barely move [7].

4 The savings model for a typical Pickering lawn

Table 2 applies the Section 3 model to three lawn sizes spanning Pickering's backyards — from the narrow 30–40 ft lots being built in Seaton to deeper established yards [10][11]. Even the largest case stays inside Durham's 45 m³/month first pricing block, so the estimated \$3.79/m³ combined rate applies throughout.

Table 2 — Modelled seasonal irrigation and cost by lawn size, Durham 2026 est. rates. *Derived; assumptions in \$M.*

Lawn	Area	Seasonal m ³	Cost/season	10-yr total
Compact (Seaton lot)	300 sq ft (27.9 m ²)	16.7	≈\$63	≈\$633
Typical backyard	500 sq ft (46.5 m ²)	27.9	≈\$106	≈\$1,057
Large or deep lot	700 sq ft (65.0 m ²)	39.0	≈\$148	≈\$1,478

Two honest conclusions follow. First, the cash saving is real but moderate — about **\$63 to \$148 a year**, higher than in neighbouring Peel municipalities because Durham's combined volumetric rate is steeper (\$3.79/m³ versus Peel's roughly \$2.37/m³). Over ten years, the undiscounted savings range from **\$633 for a compact Seaton lot to \$1,478 for a large established yard** — real money, but not enough on its own to justify the capital cost of a turf conversion. Second, the irrigation line is the only part of the bill a homeowner can eliminate: the fixed \$399 in basic charges remains regardless (Figure 1), and indoor water use — showers, laundry, dishes — is unaffected by what grows in the backyard. Water savings are one component of the broader ownership-cost case, which also includes mowing, fertilizer, and the value of the owner's time.

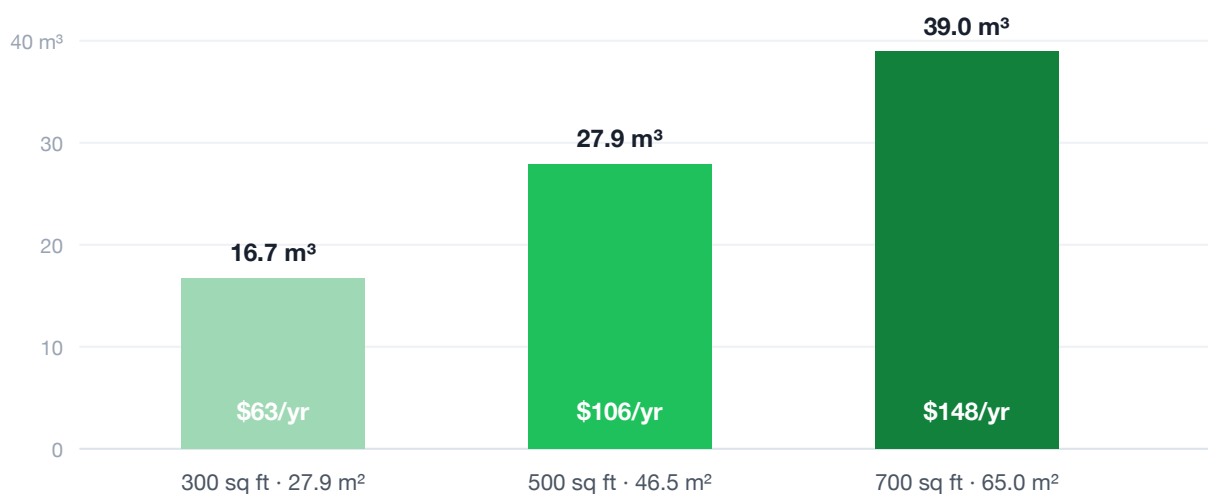


Figure 2 — Modelled seasonal irrigation volume per lawn size, with annual cost at Durham's estimated 2026 combined rate of ≈\$3.79/m³. *Derived from [1][2]; assumptions in \$M.*

5 Drought summers and restriction-proofing

Pickering's rainfall statistics hide the real problem: timing. The Oshawa station records 871.9 mm annually, but summer rain arrives in bursts too heavy for soil to absorb [8]. The city lived through two 100-year-calibre storms in one summer: on July 16, 2024, Environment Canada put Pickering, Ajax, Whitby and Oshawa under severe weather warnings, with road closures across Pickering; the Insurance Bureau of Canada put insured damage across southern Ontario at roughly **\$940 million** [9][10]. A second event on August 17–18 added more than \$100 million, pushing the summer's total past **\$1 billion** [11]. A lawn can flood on Tuesday and be parched within a fortnight.

In that pattern, the binding constraint on a natural lawn is the bylaw's rigidity. Odd-even scheduling applies regardless of soil moisture, and the Region can escalate to outright bans, as it did for North Durham in summer 2025 [5]. Each July, the practical choice is between a browning lawn that violates neighbourhood expectations, watering against the bylaw's timing and risking enforcement, or watching the meter climb as the irrigation system runs. Artificial turf removes the tension entirely: it needs no irrigation to stay green, it is unaffected if an emergency ban is declared, and its only water use is occasional rinsing — a hose for a few minutes, not a sprinkler running for hours.

Pickering's Community Climate Adaptation Plan records the 2024 thunderstorms as causing "flooding and road closures" across the city [9]. The implication is that the odd-even bylaw is the floor, not the ceiling, of watering regulation — and that a lawn dependent on regular irrigation is a liability in a climate where 100-year storms arrive twice in one summer.

Scale, honestly stated: if every one of Pickering's roughly 20,055 single-detached homes irrigated a 500 sq ft lawn on this report's model, the seasonal total would be about 559,000 m³ — a meaningful share of peak summer demand, which the Region of Waterloo's data suggests can increase consumption by up to 50% [7]. Eliminating lawn irrigation is a household-level saving and a resilience measure, not a fix for regional supply.

LOCAL CONTEXT — NO REBATE, AND ODD-EVEN STILL APPLIES

Durham's water-efficiency page offers only free resources — dye test strips, a Fusion Landscaping Guide, and free rain gauges — with no lawn-replacement or water-wise landscaping rebate available to Pickering homeowners [4]. Because the odd-even rule is a standing bylaw rather than a drought-contingent measure, an artificial lawn is the only landscaping choice that never requires its owner to remember which day of the month it is.

M Methodology & data sources

This is a desk-research report. Published figures were collected in August 2026 from the sources listed under References: the Region of Durham's 2025 rate report (Committee of the Whole Report #2024-COW-55) and 2026 rate-approval news release, Durham's water-efficiency guidance and Water System By-law 89-2003 references, U.S. EPA WaterSense statistics, the Ontario Water Works Association's Outdoor Water Use Reduction Manual, Region of Waterloo outdoor-use data, ECCC climate normals (Oshawa WPCP, 1981–2010), the Insurance Bureau of Canada's 2024 flood-event summaries, and the City of Pickering's 2021 Census profile.

Stated assumptions (not sourced facts): (i) irrigation model — an actively maintained lawn receives 2.5 cm of water per week over a 24-week southern Ontario growing season, i.e. 0.6 m^3 per m^2 per season (a widely used horticultural guideline, consistent with Durham's own 2.5 cm/week cap); (ii) all modelled irrigation falls within Durham's first monthly pricing block ($0\text{--}45 \text{ m}^3$); (iii) 2026 per- m^3 rates estimated at 2025 rates $\times 1.05$ following the approved 5% combined increase (By-law 2025-054); (iv) fixed charges likewise scaled by 1.05; (v) lawn sizes of 300/500/700 sq ft follow project ranges published in GTA installer guides; (vi) ten-year figures are undiscounted nominal dollars. Derived figures combine these assumptions with the cited rates (volume = area $\times 0.6$; cost = volume $\times \$3.79$).

Limitations

The irrigation model is a guideline-based planning estimate: real households water less, more, or not at all, and Pickering's 871.9 mm of well-distributed annual precipitation reduces irrigation need in normal summers. EPA and OWWA figures are national or provincial averages used for context, not local measurements. Per- m^3 2026 rates were not separately published at the time of writing and are estimated from the approved 5% increase. Synthetic surfaces can run hotter than living grass, and any rinsing or cooling reduces net savings. This report is not an engineering, agronomic or financial assessment of any specific property.

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