



Outside Water Use Conditions Report

Reporting period: Sept 25 – October 1

Issue date: October 2, 2024

Background

The City of Guelph's Outside Water Use Program (OWUP) was created in 2002 to help reduce water demand during peak periods and to conserve and protect our groundwater during the summer months. Based on weather trends and local watershed conditions, the OWUP has three levels that affect residential outside water use – Level 0 Blue, Level 1 Yellow and Level 2 Red.

Level Summary

- This will be the last conditions report for the 2024 season. Temperatures are slowly dropping over the next few weeks, and production is trending to normal for this time of year.
- We are still in level 0 Blue, even as our one-month indicator is showing red. There will not be a level change now as temperatures are expected to be lower in the next 2 weeks and there is rain in the forecast.
- There is rain in the forecast every other day for the next week.
- Temperatures for this week are starting to drop, with a low of 0°C next week.
- Production numbers are lower than the 10 year average and lower or at the same as last year at this time.

Season Summary

From the Soulis memorial weather station at the University of Waterloo Weather Station monthly updates (note the numbers are for the Waterloo area, Guelph's numbers will be slightly different)

September

September was the warmest September since 2018 and with 8 of 9 months above average so far in 2024, we could be looking at the hottest calendar year on record.

A couple of storms in the last week boosted the total precipitation to 21.6 mm, making it the sixth driest September in the region since records began back in 1914. This continues a streak of dry Septembers as each of the last three have been in the top 8 driest.

August

There were some warmer days and some cooler days during August, but nothing too extreme on either end. This resulted in an overall temperature that was almost exactly average (just 0.1 degrees below average).



This wet month put the total precipitation so far in 2024 at 599.2 mm, very close to the average of 596.0 mm.

July

With no extremely hot days and only a couple of cool days, the average temperature for the month of July was 0.8 degrees higher than average, this still puts it within the average range.

Two really wet days (45.8 mm on the 10th and 25.4 mm on the 16th) accounted for most of the 104.6 mm total for July. In fact, the 45.8 mm on the 10th was the wettest single day since August 29, 2021 when we saw 67.8 mm and the wettest single day for July since 59.3 mm that fell on July 7, 2014.

June

There was an extremely hot stretch of 6 days and just a few colder than average days, resulting in an overall June with a little more than a degree above average. Interestingly in the just over 25 years of data at the Soulis memorial weather station, the month of June has not been that extremely warm, so this June was only the third highest.

It was a very consistent month for precipitation with storms coming through every few days and no particularly really wet days (ie. none above 20 mm). The total precipitation was 78.4 mm which is above the average of 70.1 mm, but still within the average range.

May

With only a few below average days during the month, the overall temperature was almost 2 and half degrees above average. This is now the sixth month in a row with above average temperatures and the warmest May since 2018.

The lowest temperature we saw during the month was 3.0°C, which was only matched back in 1975 as the highest low temperature for May. April 26 was the last day it went below zero this spring, this is tied with 2013 as the earliest last freezing day in the history of Soulis weather station.

The precipitation for the month was well distributed with no particularly wet days or long dry periods. The total of 80.3 mm was just a bit more than the average of 73.8 mm, keeping it within the average range.

Precipitation Summary

Table 1 Precipitation Summary



	Precipitation (mm)	% of Normal	Level
One-month	45.2	51%	Red
Three-month	270	100%	Blue

Table 2 Days without rain

	Days	Level
Without rain	7	Blue

- Last rain dates: Monday September 23: 8.4 mm and Tuesday September 24: 7.1 mm.

Eramosa River Flows

Table 3 Eramosa river flows

Min River flow m3/s	% of minimum flow rate	Level
0.70	77%	Blue

Temperature Summary

Table 4 Temperature summary

	Past Week		2-Week Forecast	
	Min	Max	Min	Max
Temperature °C	8.9	24.9	0	22
Normals °C	7	18	6	16

Production Summary for past week

Table 5 Production summary for past week

	2024	2023
Minimum m3	43,348	41,686
Maximum m3	49,145	52,915
Average m3	46,631	47,783

- Highest production day for year: 56,725 m3* on Wed May 15, 2024
- * Reflects operational work

Grand River Low Water Response Team Updates

Members of the Grand River Low Water Response Team met on September 27, 2024.



GRCA staff recommended the Grand River Watershed remain in normal low water condition despite drier than normal conditions in August and September. The watershed received above average precipitation in the spring and fall so overall, the watershed is in normal condition based on 3- and 18-month indicators. Rain in the past week increased stream flow in some locations and all but 4 hydrometric stations analyzed are above their respective low flow thresholds. Reservoirs are at their normal operating ranges for this time of year, except for Conestogo Dam, which is being held down to accommodate dam maintenance.

The committee agreed to keep the watershed at normal low water conditions.

About this report

The data reported herein has been obtained from Environment Canada, Grand River Conservation Authority, Weather Network, City monitoring systems and summarized by City of Guelph staff. This information is reported weekly during the summer months of May to September to inform the community of the active level under the Outside Water Use Program. For more information on Guelph's Outside Water Use Program, visit guelph.ca/water or call 519-822-1260 extension 2153.