



Thursday, August 7, 2025

---

## Overview

The ORCA watershed is currently experiencing a **Level 1 seasonal drought**, driven by a combination of **low rainfall** and **high temperatures** during **June and July**. These conditions are affecting **crop yields**, **water supplies**, and **aquatic ecosystems**.

---

## Meteorological Data Summary (May–July)

### Rainfall & Temperature Trends

- **May:** Rainfall was above normal at both Peterborough Municipal Airport and Trent University.
- **June & July:** Significant rainfall deficits and increased high temperatures.
  - **June:** Rainfall was 76% below normal (Airport) and 68% below normal (Trent).
  - **July:** Rainfall was 32% below normal (Airport) and 86% below normal (Trent).
  - **High temperature days** (above 30°C) increased notably in July.

### 3-Month Totals

- **Peterborough Airport:** 20% below normal rainfall, 7 weeks without rain (<7.6 mm), 16 days above 30°C.
- **Trent University:** 40% below normal rainfall, 7 weeks without rain (<7.6 mm), 18 days above 30°C.

---

## Hydrological Drought Conditions

### Streamflow Observations

- **Jackson Creek (Peterborough & Jackson Heights):** Flow at 22% and 29% of lowest average summer month (LASM) flow → **Level 3 drought**.
- **Ouse River (Wetwood):** Flow at 50% of LASM → **Level 2 drought**.
- **Baxter Creek (Millbrook):** Flow at 108% of LASM → **No drought because significant portion of the water comes from the outflow of groundwater into the creek**.

---

### Impacts

- **Watercourses** reliant on rainfall/snowmelt runoff are facing **Level 2 or Level 3 hydrological drought**.
- **Aquatic ecosystems** and **water-dependent systems** are at risk due to **abnormally low streamflows**.

For more information, please feel free to contact

Gordon Earle, Water Resource Technologist  
Otonabee Region Conservation Authority  
250 Milroy Drive, Peterborough, ON, K9H 7M9  
705-745-5791 x214  
Email: [gearle@otonabeeconservation.com](mailto:gearle@otonabeeconservation.com)