

COMMUNICATION 132030

Received From: Guy Bourgon, Director of Public Works
Addressed To: Committee of the Whole
Date: February 23, 2021
Topic: Water Control By-law

BACKGROUND

The Town of Carleton Place has experienced significant growth since the previous Water Usage By-law 19-2002 was enacted. While winter use remains well below water treatment plant capacity, summer use is creating concerns with the system's ability to meet the essential needs of the community. It is therefore appropriate to review the Water Usage By-law at this time.

DISCUSSION

The Town of Carleton Place is experiencing unprecedented growth in the community. Climate change is also having an impact on our summer conditions, making extended dry periods and drought conditions more frequent. The Town is seeing a high level of water usage during these times, as exemplified by the July 2020 water consumption data at our water treatment plant:

2020 Daily Flows	May	June	July	August	September
Max (m ³ /day)	8133.39	8927.63	10070.99	7559.2	6483.6
Mean (m ³ /day)	5693.94	6667.17	8031.8	6321.54	5880.1
Total (m ³)	176512.2	200015	240954	195967.7	176403.1

As the functional capacity of the Water Treatment Plant is 11,400 m³ per day, the 2020 peak daily use of 10,071 m³ in July is very concerning as it does not allow for the water tower to refill and makes the system vulnerable should water be required for firefighting purposes. The peak daily use in July is roughly double the peak daily use experienced in winter and is attributable to outdoor water use. July saw very little rainfall, whereas August experienced typical rainfall which resulted in a substantial drop in daily demand. It is therefore appropriate to control outdoor water use during the summer months to protect our municipal water system from any shortfalls.

Our current Water Usage By-law allows for the watering of lawns both in the morning and in the evening. Unfortunately, this has resulted in some residents watering their lawns twice each day, which is unnecessary. Lawns only need to be watered once every 4 to 5 days.

The current recommendation is to allow residents to water their lawns from 7 p.m. to 11 p.m. This allows greater flexibility to accommodate persons working during the day. Watering beyond 11 p.m. is not recommended because it does result in residents

watering overnight. Once the ground is saturated, water begins to sheet drain to roadways and to the storm system ultimately being discharged to the river. Additionally, excessive overnight watering can also lead to the growth of fungus on lawns. Therefore, it is very important that irrigation systems be turned off prior to a resident retiring for the evening. While the permitted window in the evening is four (4) hours, residents should monitor their watering efforts and shut off their systems as soon as the ground is saturated in order to prevent the wasting of water to the river.

The new by-law will continue to permit even numbered addresses to water on even days and odd numbered addresses to water on odd days. While a lawn need not be watered more than once every 4 to 5 days, multiple days allow for flexibility for watering front yards and back yards on different days.

Exemptions have been provided for:

- newly sodded and/or seeded lawns to allow for rooting to occur;
- significant newly planted landscaping;
- the watering of municipal facilities due to evening use by residents; and
- the watering of municipal baskets, planters and other beautification features to keep them vibrant.

The water restrictions in the new by-law also apply to such activities as washing driveways, sidewalks or buildings. It does not restrict times for topping up water in recreational items such as pools as these amenities are important to residents' well-being in dealing with the heat.

The new by-law defines a non-essential water usage ban which may be imposed by the Director of Public Works in times of drought or at any other time when the water supply is at risk. Fines under short form wording will be requested from the Province for the use of water in contravention to the by-law. This will allow our by-law officers to issue fines directly without having to rely on the court system.

STAFF RECOMMENDATION

THAT Council approve the Water Control By-law which will repeal By-law 19-2002 as outlined in the report prepared by the Director of Public Works dated February 23, 2021.