



WATERING RESTRICTIONS AND THE NEED TO CONSERVE

PEAK DEMANDS ARE MAINLY ATTRIBUTABLE TO OUTDOOR WATER USE, PRIMARILY LAWN WATERING

In 2005 the Region of Waterloo implemented "Stage 2" outdoor water use restrictions due to the temporary loss of wells supplying the Greenbrook Pumping Station. The water restrictions were in effect from May 15 to September 30, 2005. Lawn watering was restricted to the hours of 7:00 a.m. to 10:00 a.m. and 7:00 p.m. to 11:00 p.m. one day per week. The date was dictated by the last digit in the street address, beginning with 0 or 1 on Monday and progressing to 8 or 9 on Friday. No weekend irrigation of residential lawns was allowed.

In Ontario there is a myth that we have plenty of water. While bountiful, there are increasing demands on the Great Lakes water and pipelines to tap them are expensive. Due to ecological impacts there has been a decline in ground water levels and the demand on ground water continues to rise. Recurring drought has taxed the recharge of these aquifers. Then there are the risks of contamination of existing sources, which was the cause of the Greenbrook and Walkerton problems.

The Region of Waterloo has 80 active water supply wells and one Grand River intake. Eighty percent of the region's water supply comes from these wells while

20 percent is derived from surface water. The long term plan is a pipe line to Lake Erie but current scheduling has that set at 2035. The region's current supply system is facing numerous problems such as aging wells with declining output, rapid residential and industrial growth and more stringent provincial regulations while at the same time having to maintain a minimum reserve for fire protection and other emergencies.

One role of the Water Services Division of the Region of Waterloo is to provide potable water at wholesale costs for local utilities that sell to residential, industrial, commercial and institutional customers. The average daily demand for these purposes in the region is 36 million gallons per day; however, peak demands during the summer months can reach 52 million gallons per day. With a maximum pumping capacity of just over 50 million gallons per day in Waterloo Region, the need for conservation during peak times is apparent. These peak demands are mainly attributable to outdoor water use, primarily lawn watering.

To minimize the peaks in water demand, the region undertook several initiatives to reduce outdoor water

consumption. Among these were an educational program about water conservation, rainwater harvesting and Stage 2 water restrictions. Stage 2 restrictions were intended to limit discretionary outdoor use but not to limit business usage.

A recent survey revealed that 91 percent of respondents support outdoor water use restrictions. During the summer of 2005, peak water demand was reduced by at least 10 percent per capita compared to 2001 and 2002, which were similar years for temperature and precipitation levels.

To accommodate the concerns of the managers of municipal sports fields, the restrictions on water use at Stage 2 have been lifted for the 2006 season. The reason for this amendment to the region's bylaw was it considered sports fields as highly specialized surfaces with strict requirements for seeding, management and efficient irrigation practices. It was also noted that sports fields are operated as a business, and a decline in turf quality may result in lost business. ♦

~ Presented by Steve Gombos, Water Efficiency Manager, Region of Waterloo
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