

Looking Back: Calgary's 2005 "30-in-30" Water Efficiency Plan

The 2005 "30-in-30" Water Efficiency Plan set a goal to reduce per capita water demand by 30 per cent over 30 years – from 518 litres per capita per day (LPCD) in 2003 to 350 LPCD by 2033 – while maintaining river withdrawals at 2003 levels (212,500 ML/year) despite a growing population. The plan was introduced at a time when Calgarians were using more water per person than many other cities in the world.

Since 2005, Calgary has experienced significant growth, welcoming more than half a million residents and increasing the number of homes, businesses, and institutions connected to the municipal water system. Despite this growth, Calgary met all the major targets from the 2005 Water Efficiency Plan (Table X). River withdrawals have remained below the target, and Calgarians successfully reduced per-capita demand by 30 per cent. Calgary also achieved universal metering and stayed below peak day demand thresholds.

This success reflects a combination of infrastructure investment, regulatory action, and community participation, and demonstrates what is possible when bold targets are paired with practical action.

Table. The indicators and targets for municipal water use efficiency from the 2005 "30-in-30" Water Efficiency Plan.

Indicator	Description	Target	Achievement
Per Capita Water Use	The average amount of water used per person per day. It is calculated by adding up all the water used by homes, businesses, institutions, and water lost through leaks and other unaccounted-for uses, then dividing by the city's population.	Reduce average daily per capita demand by 30 per cent (from 518 LPCD to 350 LPCD by 2033)	Achieved. In 2003, our per capita water use was 518 litres per person per day, a figure that has now dropped to approximately 350 litres per person per day.
Universal Metering	The implementation of water meters for all customers to accurately measure water usage, helping in tracking water demand, identifying leaks, and encouraging conservation.	Achieve Council's directive of 100 per cent metering by December 31, 2014.	Achieved. In 2004 Calgary reached 70 per cent metering among Calgary customers, up from 30 per cent twelve years earlier, largely thanks to Calgary's voluntary Water Meter Incentive Program. The goal of 100 per cent metering of all customers was achieved in 2014, facilitated by bylaw amendments requiring all customers to be metered by 2015.
Peak Day Demand	The largest amount of water used by the city in a single day. Peak daily demand in the summer can be up to 40 per cent higher than the average daily demand in winter. Managing peak day demand is crucial for ensuring a reliable supply of water, avoiding strain on our water infrastructure, and protecting flows in rivers.	Keep peak day demand below 950 ML by 2033.	Achieved. Peak day demand has remained below 950 ML/day, despite our growing population. Had Calgary continued its 2003 trajectory, peak day demand would have surpassed this limit, potentially leading to capacity issues at our water treatment plants.