

Edmonton

Overview

The water supply for the City of Edmonton comes from the North Saskatchewan River (NSR). Major tributaries of the NSR on its way to Edmonton are the Clearwater, Brazeau, and Nordegg rivers (EPCOR, 2005). In 2006, Edmonton had a population of 1,034,945 (StatsCan, 2007b). Edmonton's water and wastewater facilities are designed, built, operated and financed by EPCOR, a corporation wholly-owned by the City of Edmonton. EPCOR's rate plans are set for five years, performance based, and approved by Edmonton City Council (EPCOR, 2006a). EPCOR serves 728,187 people in Edmonton (EPCOR, 2006b). According to Alberta Environment there are no exact figures for per capita water use by Albertans (Alberta Environment, 2006).

EPCOR has a long-term replacement program for cast iron water mains since they are prone to breakage (EPCOR, 2005). In Edmonton, demand routinely outstrips supply due to population growth, extended periods of hot dry weather, poor raw water quality due to spring runoff, contamination of the NSR, and failures of major system components (EPCOR, 2007f). To cope, EPCOR is upgrading one of its two treatment plants in order to increase the system's capacity by 25% (EPCOR, 2007d).

EPCOR is a founding member of the North Saskatchewan Watershed Alliance, which is a Watershed Council under Alberta Environment's "Water for Life" Strategy (EPCOR, 2005). EPCOR seeks to enhance water quality in the NSR (EPCOR, 2007i). The City of Edmonton has launched the "Capital City Clean Up" project to, amongst other goals, reduce the amount of litter going into the NSR (EPCOR, 2007i).

Residential

Voluntary demand reduction measures are implemented when the water demand forecast predicts that demand will exceed supply from all treatment plants and reservoirs (EPCOR, 2007f). The EPCOR website has information to help consumers reduce domestic water consumption including a water audit tool and a residential water efficiency guide (EPCOR, 2007g). EPCOR's "Water Performance Report" notes that EPCOR has conducted water conservation public education campaigns and water utility "best practices" activities, e.g. leak detection, water loss control, and uni-directional flushing of water mains (EPCOR, 2005).

ICI, Metering, Pricing

All properties are metered in Edmonton. Prices are based on a consumption charge for volume and a fixed monthly service charge according to meter size.

For buildings under construction and not yet metered, there is a charge of \$0.44 per \$1,000 of value with a minimum charge of \$12.50 and a maximum of \$625 (EPCOR, 2007b). In

addition to these metered charges, all users are subject to a variety of other fees related to meter maintenance and reading (see EPCOR, 2007c).

EPCOR has a series of websites explaining water efficiency for small businesses, including a Commercial Water Efficiency Guide, Facility Maintenance Practices, and Conservation Technologies (EPCOR 2007j).

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