

gallon) with the cost of water piped to the house (about one-thirtieth of a cent a gallon in Ottawa). At a cost of 34 cents a thousand gallons, water costs about 7 cents a ton, delivered. No other material costs so little.

Commonplace, convenient, low in cost -- it is hardly surprising that this most necessary commodity gets little thought from the average Canadian.

Twenty gallons to take a bath or do the laundry, ten gallons to wash dishes, five or six gallons to flush the toilet -- all this water is used without much thought in the average household, which uses some 50 gallons a person every day. Industries located within cities also use a very large amount of water, much of which comes from municipal supplies.

In 1972, Ottawa -- the capital -- used 100 gallons a person every day. Montreal used 150 gallons a person, Vancouver 140 and Toronto 120 gallons a person every day. Industrial and municipal use account for most of the difference between the average of 50 gallons a day used by each person and the city's total consumption. *Per capita* use for domestic purposes probably does not vary appreciably from city to city.

*Industry:* Industry has an enormous thirst for water. The largest quantity is used for cooling purposes, but considerable amounts are also used directly in many manufacturing processes; another important use is in plant sanitation. Figures are frequently published to indicate how much water is used in various industries -- like ten gallons of water to refine a gallon of gasoline, 18 barrels of water to refine a barrel of oil, 250 tons of water to produce a ton of sulphate wood pulp, 100 gallons of water to produce a gallon of alcohol. These figures are interesting as a general indication of the need for water, but they may be misleading. Far too often they reflect the fact that water is easily available, inexpensive, and therefore often used inefficiently.

Take, for example, the amount of water required in the production of steel. The usual, or average, amount of water used to produce a ton of steel is about 60,000 gallons; yet there is a steel-mill in California that, by cooling and recycling its water, uses only about 1,400 gallons to produce a ton of steel. A wide variation like this is by no means unusual. When water becomes scarce, and therefore valuable, it can be and is used much more efficiently than if it were plentiful and cheap.