

# Water Efficiency in the Bathroom

## SHOWERS



THE CORPORATION OF THE CITY OF

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### Showering and Bathing

People used to believe that showers were less wasteful than baths. Although a shower can use less water if short in length, many of us spend 10 minutes or more in the shower. To get a handle on how much water you use, plug the drain the next time you shower and compare it with taking a bath. Spending less time in the



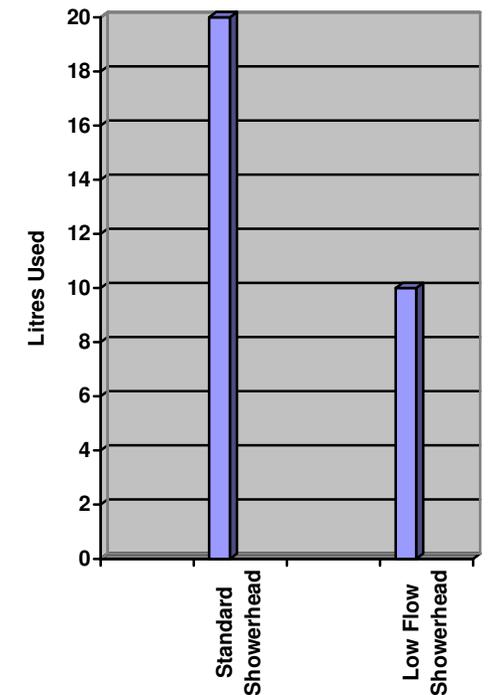
shower or cutting down on the water you use to fill the tub for a bath, can add up to a significant water savings over time.

Another way to reduce water use is to install a “low flow showerhead”. Low flow showerheads mix a greater amount of air with the water, reducing water consumption by as much as 75%. Although there is less water and more air than a standard showerhead, they are specially designed to provide a forceful spray. Not only do you save water, you also save on heating the water, so your hot water goes further. Low flow showerheads have improved a lot in recent years—seek recommendations on styles and brand names from friends, family, plumbers or plumbing stores.

To determine whether or not you should install a low flow showerhead, check the flow rate of the existing unit by following the steps below:

1. Check first for a stamped flow rate on the neck of the showerhead. Most low flow models state their flow rate, if none is found, it probably is not low flow.
2. Turn your cold water tap to the FULL FLOW position, (Tip: use the showerhead diverter when ready to start measuring and turn off tap quickly).
3. Hold a graduated container (e.g., 2.25 litre juice jug) under the showerhead or faucet for a total of six seconds.
4. Measure the amount of water collected and multiply by ten to get the volume per minute. For example, if you collected 1.9 litres in six seconds then the flow rate is  $1.9 \times 10 = 19$  litres per minute.

Showerhead Type	Water use
Standard	18—27 L per minute
Low Flow	9—11 L per minute



### How much can I save with my new showerhead?

Number of persons	2 person family	4 person family	6 person family
Showering time	10 minutes per day	20 minutes per day	30 minutes per day
Yearly savings	\$35.00	\$70.00	\$105.00

A new low flow showerhead will pay for itself in the first year of use. Additional savings can be achieved through the use of a model with a “trickle” button that allows you to stop all but a trickle of water while you lather up or shampoo, and the resume at the same flow rate and temperature.

#### Tools and materials required:

- channel-lock pliers or pipe wrench
- crescent wrench
- thread seal tape
- spray lubricant
- rag, tape or piece of rubber
- bathtub size piece of carpeting or rubber mat
- rag or wire brush
- low flow showerhead



### Installing a Low Flow Showerhead

1. Before attempting to remove the old showerhead, check the condition of the shower arm and piping. Call for professional help if:
  - your home has galvanized iron pipe, identifiable by its silver colouring and threaded fittings (galvanized pipe corrodes with age and is very difficult to work with);
  - showerhead does not remove easily;
  - the showerhead extension pipe moves, twists or leaks.
2. Cover the bathtub with a rubber mat or carpeting to protect the enamel.
3. Affix channel-lock pliers or a pipe wrench securely to the shower arm approximately 2.5 cm above the showerhead attachment nut. (Tip—to prevent scratching, try wrapping a rag, layers of masking tape, or a piece of rubber tubing such as an old bicycle inner tube, around the showerhead pipe when removing or installing the showerhead.)
4. Affix a crescent wrench to the showerhead attachment nut. Maintain a firm hold on the channel-lock pliers and turn the crescent wrench slowly in a counter clockwise direction to remove the showerhead.
5. It may be necessary to apply a small amount of spray lubricant to soften the scale and hard water deposits if the showerhead is stuck.
5. Turn the shower on briefly after the removal of the fixture to flush out any old residue and clean the pipe threads of the old sealant with a rag or wire brush.
7. If the pipe ends in a ball-shaped fitting, it too will have to be replaced or a ball-fitting adapter installed.
8. Test fit the new showerhead (screw on by hand) to ensure the threads match and then remove.
9. Wrap thread seal tape clockwise around tip of shower arm.
10. Install the new showerhead.
11. Wrap a cloth around the showerhead attachment nut and tighten slightly with a crescent wrench.
12. Turn on the water to check for leaks. If necessary, tighten further or reapply thread seal tape to stop the leaking.