



**ALL ABOUT  
WATER CONSERVATION**



# SUSTAINABLE OKOTOKS OVERVIEW

The Sheep River is the literal and figurative heart of Okotoks and has become central to Okotoks' pursuit of a more sustainable development path. The convergence of rapid population growth, a river carrying capacity (water - effluent) of approximately 30,000 people, and resident desire to maintain key elements of 'small town atmosphere' were articulated in the adoption of a Municipal Development Plan in 1998.

The Plan established Okotoks as one of the first municipalities in the world to establish population growth targets linked to infrastructure and environmental carrying capacity. The Plan has captured the hearts and minds of local people and a global audience seeking new ways to build and maintain the initiative threads that build a strong community fabric.

The Town has pursued a comprehensive set of sustainable development activities since 1998, addressing the complex and inter-related fabric of social, economic, fiscal, and environmental spheres of community life. The most successful initiatives to date include: solar energy use, reduction of CO2 emissions, solid waste reduction and recycling, water conservation, a composting sewage treatment system, and housing mix and affordability.

The Town has taken a proactive approach to working with residents, businesses and commercial users to manage water wisely in an effort to reduce per capita water consumption by 33% over 1995 consumption levels. Examples of our water management activities include:

1. Water regulations in effect May – October.
2. Setting a per capita water consumption target of 318 litres per person per day. 2007- 354 litres/person/day).
3. 100% of utility accounts are on water meters.
4. Bylaw requiring the installation of low flow toilets, taps and showerheads in all new homes and home renovations.
5. Ecoscaping (use of low water demand perennials and annual plants, grasses, trees and shrubs) is encouraged.
6. Sustainable landscaping standards in new subdivisions.
7. Ongoing water rate re-structuring to reduce flat rates and increase consumption rates.
8. An annual water and waste conservation education program.

# TOWN WATER REGULATIONS

Due to recent increases in water consumption, changes have been made to the Town of Okotoks water regulations. Residents will now be able to water only two days a week.

**Standard water regulation in effect  
May – October  
\*1 hour/week of watering is  
adequate for established lawns**

**Odd numbered addresses may  
water lawns:  
Thursday &/or Sunday**

**Even numbered addresses may  
water lawns:  
Wednesday &/or Saturday**

**Watering may occur only during  
the following hours:  
6:00 am - 9:00 am  
7:00 pm - 11:00 pm**

Flowerbeds and vegetable gardens may be watered by hand, at any time using a watering can or a hose with a trigger nozzle to restrict water flow.

The Town works with large scale commercial and institutional water users such as schools and churches to ensure that the best practices are utilized to reduce draw on the water system when at its peak. Requests for site and condition specific irrigation scheduling for commercial/institutional operations using metered irrigation systems must be approved by Town of Okotoks Operations.

Please respect the specified watering day and hours, as water is a limited resource. Fines for not obeying the water regulations range from \$100 – \$2500.

Residents will be informed of any further conservation action taken through [www.okotoks.ca](http://www.okotoks.ca) and on the Eagle 100.9 FM.

# OUTDOOR WATER CONSERVATION TIPS



## GROW A HEALTHY LAWN USING LESS WATER

- Water your lawn once a week (or less if it rains) for no more than 1 hour. To measure, use a Frisbee. Once it's full, (1" or 2.5 cm), watering is complete. Too much watering creates a shallow root base making lawns dependent on frequent watering.
- Use mulches like bark, wood chips and other materials to reduce water evaporation and inhibit weed growth.
- Use a sprinkler that lies flat. Oscillating sprinklers lose as much as 50% of dispersed water through evaporation. Aim sprinklers away from driveways and sidewalks to ensure only the lawn is being watered.
- Leave your grass at 7.5 centimetres (3 inches) long. Taller grass shades roots and will help retain soil moisture.
- Leave grass clippings on the lawn to increase organic matter in the lawn, discourage weeds and retain moisture. Keep the lawn mower blade sharp and mow when the grass is dry. Clippings left on the lawn will break down easily.
- Replace your grass with native plants and ground covers that are drought resistant. Talk to a landscaper about "ecoscaping" or "xeriscaping".
- Use a rain barrel to gather water for lawns and gardens as rain water contains no chlorine, is softer than tap water and is the same temperature as plants. Rain barrels are available at most home supply stores and are very economical.
- Water your lawn in the morning as it is cooler, often with little or no wind. The heat of the day will cause the water to evaporate.
- Avoid over-fertilizing your lawn as it increases the need for water and is a source of pollution.
- Don't hose down your driveway or sidewalk; use a broom instead and save litres of water.

# INDOOR WATER CONSERVATION TIPS

“On average, a family of four uses approximately 500,000 litres of water per year for domestic use.”

EPCOR WATER SERVICES

## TYPICAL HOUSEHOLD WATER CONSUMPTION

EPCOR WATER SERVICES

Bath & Shower	34%
Toilet	29%
Laundry	19%
Kitchen	14%
Other	4%

## USE LOW FLOW FIXTURES

In September 2002, Okotoks Town Council introduced a low flow plumbing fixture bylaw (BYLAW 16-02) which requires all new homes and renovations to install water efficient taps, toilets and showerheads. Over 2000 new homes in Okotoks have been built to these new water efficient standards.

### What is a low flow fixture?

#### TOILETS

6 litres (1.6 gallons) per flush maximum. To view the Town's Approved Toilet List, visit: [www.okotoks.ca/sustainable/publications.asp](http://www.okotoks.ca/sustainable/publications.asp)

#### SHOWERHEADS

Must have a flow capacity of not more than 9.5 litres (2.5 gallons) per minute. Where more than one showerhead is to be installed in a shower enclosure, the cumulative flow capacity of all showerheads shall not exceed 9.5 litres per minute. Low-water-use showerheads do not affect water pressure and some models come equipped with an off button to allow for lathering.

#### TAP AERATORS

Indoor faucets should be equipped with a tap aerator. A family can save more than 6435 litres of water per year by installing low flow faucets.

## HERE ARE SOME WAYS YOU CAN REDUCE INDOOR WATER USE AND SAVE MONEY.

- Don't let the water run while brushing your teeth, shaving or washing your face. You can save over 11 litres of water by filling the sink with just a few inches of water to use for rinsing.
- Minimize the use of kitchen garburators, as they require a lot of water to operate. Start a backyard composter, as most organic waste can be composted and used on plants and gardens.

# INDOOR WATER CONSERVATION TIPS



## FIND AND REPAIR LEAKS

### Toilets

A leaky toilet can waste up to 200,000 litres of water a year (Environment Canada). This could add up to as much as \$444 (2008 rates) on a yearly utility bill. Studies indicate that one in every four toilets leaks, so these costs can really add up.

Check for leaks twice a year by putting a few drops of food colouring into your toilet tank and waiting 15 minutes without flushing. If the water in the bowl changes, you have a leak, and the flapper may need replacement.

### Some other things to check:

#### EPCOR WATER SERVICES

- Does the chain length need adjusting?
- Is the ballcock leaking?
- Does the arm float require adjusting? (The water level should be 13 mm (1/2 inch) below the overflow tube.)
- To prevent syphonage, ensure the refill tube is 25 mm (1 inch) above the overflow tube.

### Water Meters

Locate your water meter (usually in the basement by the water heater or laundry), record the meter reading after household water use has ceased in the evening. If the indicator has increased through the night, you may have a leak.

## ENERGY STAR APPLIANCES

Look for the “Energy Star” sticker on the front of appliances to ensure the most energy efficiency. Front-load washing machines can consume as little as 90 litres of water per wash, which is almost 50% less than conventional top-load machines. They also require less electricity due to the more efficient spin cycles.

Run the washing machine and dishwasher only with full loads and utilize the “energy saver” cycle.

## WATER UTILITY RATES

The Town has implemented a “consumption based” water rate, which better reflects our sustainable vision. Under the billing structure, water and sewer rates incorporate a consumption charge that is based on the amount of water consumed.

- 53% of Okotoks households use less than 45 cubic meters (10,000 imperial gallons) bi-monthly.

# INDOOR WATER CONSERVATION TIPS

## FAMILY WATER AUDIT ([www.wateruseitwisely.com](http://www.wateruseitwisely.com))

Check the boxes which best describe your water use habits; then calculate your score to see how well you conserve water.

**Often – 3 pts, Sometimes – 1 pt, Never – 0 pts**

### Personal Habits    Often    Sometimes    Never

Keep showers to under 5 minutes			
Use only a little water in the bathtub			
Turn off the water while brushing your teeth			
Put water in the sink when washing up			
Flush the toilet only when necessary			
Use a broom to clean the driveway or sidewalk			
Use a bucket when washing the car			
Use a turn off nozzle on the end of the hose to adjust the water flow			
Turn the water faucet tight			
Put water in the kitchen sink to wash and rinse dishes			
Run the dishwasher only when its full			
Run the washing machine only when its full			

The more you use –  
the more you pay.

The less you use  
– the less you pay.

## BE WATER WISE!

### WATER UTILITY QUICK FACTS

- EPCOR Water Services tracks all potable drinking water and knows how much is used and when. (e.g. residential, commercial, development construction, fire and process water, irrigation, etc.)
- 100% of Okotoks household, commercial and institutional utility accounts are metered, including parks and playfields.
- SUSTAINABLE OKOTOKS has set a specific water use target to achieve 318 litres (70 imperial gallons) per person per day.

**18 – 36**

**Great job!** You are on your way to saving hundreds of litres of water.

**12 – 17**

You are off to a great start!  
Learn more ways to save water.

**0-11**

You have a lot of room for improvement. Re-read this brochure and surf the web for great resources.

## References

**EPCOR Water Services, Inc.**  
[www.epcor.ca](http://www.epcor.ca)

**City of Calgary Waterworks**  
[www.calgary.ca/waterworks](http://www.calgary.ca/waterworks)

**Environment Canada**  
[www.ec.gc.ca](http://www.ec.gc.ca)

[www.wateruseitwisely.com](http://www.wateruseitwisely.com)

The Town is now selling outdoor water conservation kits to assist residents in saving water and money. To purchase a kit, call 938-4404 or drop by the Municipal Centre (5 Elizabeth Street).

## Other information on water conservation

**Alberta Environment**  
[www.gov.ab.ca](http://www.gov.ab.ca)

**Canada Mortgage & Housing Association**  
[www.cmhc-schl.gc.ca](http://www.cmhc-schl.gc.ca)

**Canadian Water & Wastewater Association**  
[www.cwwa.ca](http://www.cwwa.ca)

**American Water & Wastewater Association**  
[www.waterwiser.org](http://www.waterwiser.org)

**Sustainable Okotoks (Town of Okotoks)**  
[www.okotoks.ca/sustainable/overview.asp](http://www.okotoks.ca/sustainable/overview.asp)



[www.okotoks.ca](http://www.okotoks.ca)