

What Other People are Doing

The city of Frankfurt Germany has an extensive water management plan in place (see 'The German Water Sector' on our website www.egt.ca for details).

Frankfurt has reduced its water consumption by 20% over 1991/92 levels. Contributing to this were changes in consumer behavior and upgrading of water saving installations and fixtures. They are also providing a subsidy program to encourage homeowners to use their rainwater to flush their toilets, wash laundry and water the garden. In addition to substituting rainwater for potable (drinkable) water for these things, domestic greywater gained in significance. Greywater is the runoff from the bathtub, shower, washbasin or washing machine. In a water-conserving household, approximately 60 litres of greywater are generated per person each day. It is a constant volume of water and represents a constant resource. According to the publication, The German Water Sector, "Greywater is only slightly polluted: to a large extent free from feces, oily substances and solid matter; only slightly bacterially contaminated; and furthermore has a usable temperature."

How do we reduce our water consumption?

In Alberta, we do not have the option of using our greywater yet. It is presently illegal to do this, according to the National Building Code for Alberta. The Code defines all water that exits a plumbing fixture to be "black" water and required to go to the municipal sewage treatment facility.

How can we use our rainwater?

We can use our rainwater by disconnecting our downspouts and storing the rainwater in a barrel. The barrel should be placed on a smooth durable surface such as sidewalk blocks, paving stones or a sturdy wooden deck. The house roof is the collection surface and the eaves, which need to be cleaned out for optimum water delivery, transport the

water to the downspout locations. The water can then be removed from the barrel by a garden hose, bucket or watering can. The overflow must be designed to take water away from the house foundations.

How much water do we need for our garden?

A report done by Stanley Associates Engineering Ltd. "Rain Catchment For Lawns and Gardens - A Strategy to Reduce Peak Water Demands" (see egt.ca) has created a chart to determine the optimum amount of storage to water a specific size garden from a given roof collection surface, available at www.egt.ca or if you do not have internet access, phone the Waste Hotline at 496-5678 and we will mail you a copy.

Using rainwater will replace the treated water currently used to water lawns and gardens. Your water and sewer savings rate is currently 197.97 cents per 1000L (1m³) for less than 60,000L. For consumers who use over 60,000L it is 201.68 cents per 1000L.

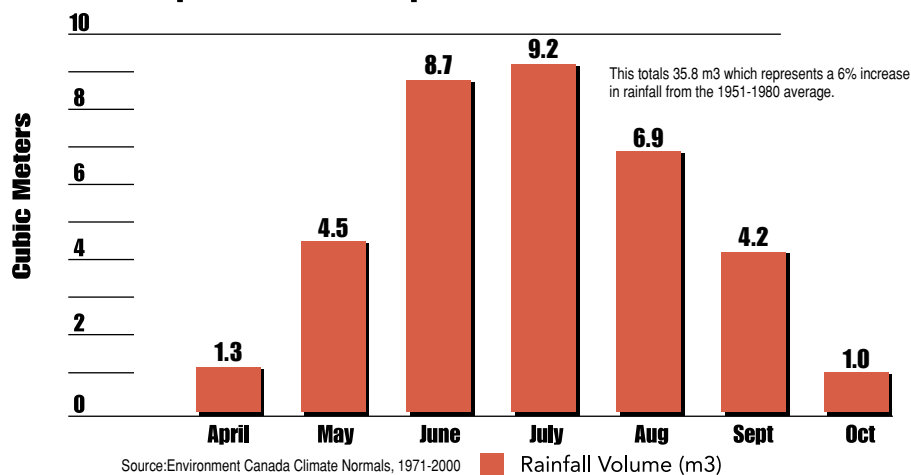
How can we conserve water year round?

1. Change to a low flow toilet. The new ones have a 2-button flush for 3 and 6 litre flushes (check www.egt.ca to purchase).
2. Ensure you have a low flow shower head. The new ones actually work, and will reduce consumption from 20 litres to 9 litres per minute. You save natural gas as well as less water needs to be heated.
3. Use an aerator on your sink faucet. The lowest flow models are down to 2 litres per minute
4. Install single lever controls for sink and shower. Less time is required to adjust the temperature.
5. Check for leaks in all the plumbing fixtures. Changing the washer in a tap handle is easy and stops drips - check the library for help from a plumbing book.
6. Invest in a front load washing machine and water efficient dishwasher when upgrading - or wash dishes by hand!

Water conservation can be part of your landscape design!

- Rain barrels contain rain run-off, to be used for watering purposes.
- On sites with a slope, contouring is applied - digging swales to trap rain.
- Dense plantings are used to create shade and lower soil surface temperature, thereby reducing evaporation.
- Mulches are used between plantings to reduce evaporation as well.
- Use of native trees and shrubs that are adapted to your location.
- Compost worked into soil increases its organic content, which acts as a sponge to hold water in the soil.

Potential Volume of Rain Collected Per Month from 100 Square Metre (1100 Square Foot) Roof Surface in Edmonton



Rain Barrel Demonstration Project Workshops

Rain barrels, assembled from new, recycled or reused plastic barrels, are available by calling Brian Johnston at 433-7508, or by making an online purchase at our secure site www.egt.ca. The purchase of a rainbarrel and monitoring your past year's and following year's water bills entitles you to a free course from the Local Living workshop series or the Mini Lawn-be Gone Edmonton Workshop. All workshops are offered on the main floor in the Donald Ross School, located at 10125-97 avenue (North of Telus Field), the new home of the Environmental Resource Centre.

Room A

Local Living Workshops Series

We cover the following topics in our six, two hour workshops, Thursdays 9:30-11:30 am or 7:00-9:00pm. Pre-registration by phone is required-call 457-9519 to book a spot. Workshops are \$10.00 per session. See egt.ca for course outlines

Instructors: Karin Adshead & Brian Johnston

- Composting Techniques & Water Conservation Methods June 12
- Rainbarrel Demonstration Project OPEN HOUSE
Local and Global Perspectives on Irrigation. Come On Down and try some free "Cool Hemp Non Dairy Dessert", courtesy of The Cool Hemp Company Inc. June 19
- Permaculture: Earth-Friendly Landscape Design..... June 26
- Organic Gardening & Safe Lawns for Kids July 3
- Fruit Trees & Shrub Maintenance July 10
- Greening Your Home: Lower your Impact
On the Earth July 17
- Alternative Energy Options: A Look at Solar
And Wind Energy July 24

Instructors:

Karin Adshead is an experienced environmental educator and lifelong gardener. She enjoys empowering people to make change-starting in their own backyard. **Brian Johnston**, P. Eng., the Rainbarrel Demonstration Project team leader, is an experienced rainwater harvester, educator and civil engineer.

Room B

Mini Lawn-be-Gone Edmonton

Instructors: Chris Ford and Dwayne Wohlgenuth

Offered on thursday evenings throughout the summer with the exception of June 19th, which is the Rain Barrel Demonstration Project Open House. Come On Down and try some free "Cool Hemp Non Dairy Dessert", courtesy of The Cool Hemp Company Inc.

Create your own lawn alternatives with an introduction to water conservation, rainwater harvesting, organic gardening, native plants and xeriscaping.

Cost \$10 or free to Rainbarrel Demonstration Project participants

All Day Lawn-be-Gone

Instructors: Chris Ford & Sandra Lange

This is an intensive, daylong version of the Mini-Lawn-be-Gone workshop.

Course Dates: June 8, 15, July 6, 13, 27, August 3, 10.

Course Time: 10:00am-4:30pm

Cost: \$45 if you pre-register, otherwise \$55

Make cheques payable to the Garden Institute of Alberta, PO Box 68205 162 Bonnie Doon Mall Edmonton T6C 4N6. Please note "Lawn-be-Gone" on your cheque.

Register for the Lawn-be-Gone Workshops by phoning the Waste Hotline at 496-5678

Instructors:

Chris Ford is an experienced organic gardener, educator and co-author of Lawn-be-Gone Edmonton.

Dwayne Wohlgenuth is a member of the Rainbarrel Demonstration Project Team, coordinates the U of A Campus garden, is past design leader for the U of A Solar Vehicle Project and is studying engineering at the U of A. **Sandra Lange** has an MSc in Solar Energy, recently finished her MDes at the U of A and created the design for an eco friendly learning environment for an Edmonton Elementary School.

The Garden Institute of Alberta is a charitable, non-profit organization dedicated to biodiversity, organic agriculture and gardening.

Upcoming Complementary Events

June 20 Healthy Kids, Healthy Planet: Investigating the impact of pesticides on childrens health. For professionals, teachers and parents. Cost \$10.00.

Primary Sponsor The Canadian Institute of Child Health (CICH).

Call 457-9519 to register. See www.earthchallenge.com for info

June 21 Edmonton's EcoSolar Home Tour see www.ecosolar.ca for details.

July 12 Bikeology-Celebrating the Bicycle and Ecology 12:00-4:00pm Beaverhills House Park 12-4pm see www.egt.ca for details.

August Tour of Edmonton Lawn-be-Gone front yards see www.egt.ca for details