



water conservation [inside the home]



Water Facts

- Of all the water present on earth, 97.5% of it is not fit to drink
- Of the 2.5% that is consumable, one third is frozen in the form of glaciers and polar ice, leaving roughly 1% available for human consumption
- Our water resources are reducing every year due to pollution and changes in the world weather and rainfall patterns due to global warming
- A 40% increase is expected in world water demand over the period of next two decades because of growing population, increased agricultural needs, industrial use of water and water needed for electricity production
- Conservation of this precious resource matters!

Here are some measures we incorporated into the construction of our home to reduce the amount of water our household uses inside:

1. Capturing rainwater runoff from the roof in 2 x2500 gallon underground cisterns. This water is used to flush our toilets and supply the exterior hose bibs.
2. Selecting highly efficient plumbing fixtures (faucets in kitchen and bathrooms, showerheads). A) This proved to be fairly easy...there is pretty good awareness in the plumbing industry so the stores were helpful. We just asked to speak to the staff most knowledgeable in water efficiency and sent the LEED specification for them to review in advance of our meeting. B) Installing an instant shut off valve in the master shower allows us to turn the water off as we lather up or shave and then immediately on (already dialled into the right temperature) to rinse. C) Toto brand low flush toilets.
3. A hot water recirculation pump allows us to get near instant hot water from the taps rather than having to let them run for a long time to get the hot water through the pipes.
4. Selecting the most water efficient appliances (dishwasher, clothes washer). This was also pretty easy. We basically did our preliminary shopping on the Natural Resources Canada website where they list every appliance by efficiency-too easy! (See the Resource page of our webpage for the link directly to the NRCAN appliance listings, it's a bit tricky to find).

High efficiency fixtures and appliances cost close to the same as their traditional counterparts, BUT there is actually a huge indirect saving in water heating costs. Using all low flow showerheads and a water efficient dishwasher and clothes washer allowed us to size down the solar array because we had less water to heat to get the same jobs done.

