

Sustainability Newsletter

The Importance of Water Conservation

In Canada, there is water all around us, and it is retrieved so easily that we may often take it for granted. We can just turn on the tap and get water instantly, without thinking about the water that goes down the drain. Of all the water in the world, only 1% is drinkable and available to humans through rivers, lakes and groundwater. The rest of the water is either salt water in oceans, frozen, or simply impossible to get to.



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Water is a renewable resource, in the way that it evaporates and then returns to the earth as rain or snow through the hydrologic cycle. However, because of increased water pollution, growing populations and climate change, water conservation is becoming very important.

As the world's population grows, our water resources will remain the same. More and more people are using the existing groundwater and surface water supplies, possibly faster than they can be replenished, which may result in future water shortages. Climate change has already caused droughts and flooding, making water unsuitable for consumption.

With the abundant rivers and lakes all around us in the RDBN, it may seem like we will never run out of water. Climate change could certainly have an impact on this perception in the near future as water supplies may be impacted. Increasing pollution of the surface water and ground water that we do have may further limit the health of our water systems as well.

Energy consumption also becomes an important issue when discussing water use. Heating the water you use for a shower takes energy, and every drop of water that comes out of the tap (for those on municipal systems), must be cleaned and filtered at a treatment plant, which also uses power.

The average Canadian uses approximately 329 litres of water per day, through toilet flushing, washing dishes, laundry, and drinking. In Sweden, the rate of water consumption per person is 200 litres, whereas in France it is 150 litres.

To help maintain the quality and quantity of water available to us in the RDBN, we must to our part to protect it, which means reducing the amount of water we use on a daily basis. This can be done by:

- Switch to low flow toilets (6 litres per flush)
- Fix leaking taps
- Avoid pouring clean water down the drain—use it for watering plants or as pet/animal water supply



Avoid unnecessary lawn watering

Drinking Water Week 2014



We are fortunate in Canada to have such easy access to fresh, clean drinking water. There is a significant amount of work and expense that goes toward treating our water, delivering it to our taps, and then managing the wastewater that goes down the drain. To reduce water waste, try making these simple changes:

- If possible, install a rain barrel under your gutter spout to collect rain water for lawn and garden watering needs.
- Fix leaky taps and toilets. A toilet that runs for too long can waste as much as 200,000 litres of water per year!
- Do not put oils, fat or grease down the drain. This can cause clogs down the line and create expensive problems.

To promote the wonderful, beneficial resource that BC's water is, the British Columbia Water and Waste Association (BCWWA) has proclaimed May 4-10th, 2014 to be Drinking Water Week. You can join in the fun by pledging to protect BC's water and taking part in one or more of BCWWA's water wise challenges. For additional information, visit <u>www.drinkingwaterweek.org</u>.

Which Activity Uses More Water?

Automatic Car Wash or Hand Washing your Car at Home?

Although washing your car in the driveway might seem relatively harmless, it is actually quite environmentally unfriendly. This is because the soapy water that runs off your car can travel into storm drains, and eventually into rivers and streams, causing potential harm to wildlife.

Commercial car washes, on the other hand, often have oil-water separators in place to reduce harmful substances from entering the sewer system. Some car wash businesses also install computerized systems to recycle their rinse water.

Therefore, commercial car washes may be the best choice. If you wash your car at home, make sure to use an environmentally friendly, biodegradable soap and limit water use.





Automatic Dishwasher or Hand Washing Dishes in the Sink?

There are many factors to consider when comparing water use from hand washing dishes and washing dishes by hand, including the age of the dishwasher and which load type has been selected.

The average built-in dishwasher uses 22 litres of water per cycle. The average faucet flows at 7 litres per minute. If you can hand wash (and rinse) a full dishwasher-sized load of dishes without running the water for more than 3 minutes in total, the two methods are comparable. However, we typically fill the sink with soapy water, followed by a thorough rinsing of each dish. Therefore, it seems unlikely that hand washing that many dishes would be more efficient than a machine. Don't have a dishwasher? Try to fill your second sink (or a large bowl) with rinse water for rinsing soapy dishes instead of running the tap for rinsing.

The RDBN's 2013 Climate Action Report

As part of its commitment to the BC Climate Action Charter, the Regional District of Bulkley-Nechako reported carbon emissions for the 2013 year, which were calculated by using the Provincial Government-created program SMARTTool.

In 2013, the emissions produced by the RDBN's corporate operations totalled 695 tCO_2e (tonnes of Carbon Dioxide equivalent). These emissions primarily came from waste hauling activities, followed by heating and electricity in RDBN-owned buildings.

Actions taken in 2013 to reduce carbon emissions included upgrading lighting at the Smithers-Telkwa Transfer Station to induction technology, upgrading roof insulation at the Bulkley Valley Pool, establishing in-office composting and recycling programs, and conducting an energy audit of the RDBN office.



Dog Waste Composting

Just like other organic wastes, such as food scraps, decomposing dog waste creates powerful greenhouse gas methane, when buried in the landfill. This is because organic wastes buried in the landfill undergo anaerobic digestion, meaning they do not receive oxygen while decomposing. Compost piles, on the other hand, are exposed to oxygen as they break down, through turning and microorganisms living in the pile. Through this process, carbon dioxide is produced instead, a much less potent greenhouse gas.

Composting your dog's waste is a great alternative to tossing it in the garbage. Follow the instructions below to make your own backyard dog waste composter:



You will need:

- Plastic garbage can with lid (or a large bucket with lid)
- Drill with 1/4" drill bit
- Jig Saw
- Shovel
- Septic bacteria treatment



To begin, choose an area of your yard that has good drainage, away from vegetable gardens. If you're not sure if an area is safe to dig, phone BC One Call at 1-800-474-6886. Dig a hole a little bit wider than your container, and 6 inches shorter, to keep it raised above ground. To help with drainage, add rocks/gravel to the bottom of the hole, about 2-4 inches in depth.

Drill holes into your container, starting at 6 inches from the top of the can or bucket. Place the holes about 3-6 inches apart. These holes will allow helpful organisms to travel between the soil and the container. Next, cut the bottom of the container using the jig saw, 2 inches away from the holes.

To start using your dog waste composter, simply add pet waste and close the lid afterwards. Add water and the septic bacteria treatment to help kick start the composting process and break down pathogens. The septic treatment can be added about once per week. To help keep odours under control, add dry leaves or shredded paper every so often.

Note: Cat waste cannot be composted safely, as it contains the parasite Toxoplasma gondii, which is harmful to humans. Cat waste and cat litter should be disposed of in household garbage.

Spaghetti Squash Recipes

Spaghetti squash is a great alternative to pasta, potatoes or rice and is a great way to get more vegetables into your diet. When cooked, the squash shreds into threads like thin spaghetti and is extremely versatile. Not only is spaghetti squash more nutritious than regular pasta, it is also just as filling. Spaghetti squash is much lower in calories than wheat pasta at 42 calories per cup, whereas wheat pasta is 220 calories per cup! Consider switching regular noodles for spaghetti squash at your next pasta meal.

The best way to cook spaghetti squash is by roasting it in the oven. First, cut the squash in half lengthwise, scoop out the seeds and bake it, flesh side down at 350°F for 30 minutes, or until it can be easily pierced with a knife. When the squash is ready, scoop out the stringy flesh with a fork. It's ready to top with your favourite spaghetti sauce or to be used in the recipes below!

Cheesy Veggie "Pasta" Bake



Ingredients

- 1 whole spaghetti squash
- 2 tablespoons olive oil
- 1 red pepper, diced
- 1 zucchini, diced
- 1 carrot, shredded
- 2 cloves garlic, minced
- 1 tomato, diced
- 2 cups tomato sauce 1/2 cup shredded mozzarella cheese
- 1/4 cup shredded parmesan cheese

Directions

- 1. Bake squash as outlined above.
- While squash is cooking, add the oil, garlic, pepper, zucchini, and carrots to a pan, cooking over medium heat.
- 3. Place the cooked spaghetti squash flesh in a casserole dish. Add the cooked veggies, diced tomato, sauce, and most of the cheese and mix well. Sprinkle leftover cheese on top and bake for 30 minutes or until the cheese is bubbly.

Allow to cool for five minutes, serve, and enjoy!

Greek Spaghetti Squash Salad



Ingredients

- 1 whole spaghetti squash
- 1 cup diced tomato
- 1 cup diced cucumber
- 1/2 cup diced onion
- 1/2 cup olives
- 1/2 cup crumbled feta cheese

Dressing:

- 2 tbsp fresh lemon juice
- 1/3 cup olive oil
- 1/2 tsp oregano

Salt and Pepper to taste

Directions

- 1. Bake squash as outlined above.
- After scooping out the flesh, place it in a bowl and allow it to cool in the fridge for about 20 minutes.
- Chop the cooled squash into smaller pieces.
 Place it in a bowl and mix in tomatoes, cucumbers, onions.
- 4. Toss salad with dressing.

