



## Our Water: Challenges & Solutions

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<http://nvecoboosters.com> (Event recording can be found on the NVEB YouTube channel)

[www.facebook.com/Nith-Valley-EcoBoosters](http://www.facebook.com/Nith-Valley-EcoBoosters)

<https://www.instagram.com/nvecoboosters>

### Resource Document

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*Please note that the Nith Valley EcoBoosters do not verify the facts contained in the information provided by any external links on this page. Please use the information provided as a starting point for research into various topics of interest. The listing of an external link on this page does not imply Nith Valley EcoBoosters endorsement of an organization, its principles or its policies.*

#### **Benefits of Water Conservation:**

**Environmental Protection:** Reducing water usage helps protect aquatic ecosystems and maintain biodiversity by ensuring that natural water sources are preserved.

**Cost Savings:** Implementing water-saving strategies can lead to lower utility bills for households and businesses, making conservation economically beneficial.

**Resilience Against Climate Change:** Effective water management practices enhance community resilience to droughts and water shortages, which are becoming more frequent due to climate change.

**Implementing effective water conservation strategies is essential for sustainable resource management, reducing waste, and protecting ecosystems.**

### Key Strategies for Water Conservation

#### **1. Creating Behavioral Changes at home and in workplaces:**

**Shorter Showers:** Aim for 5-minute showers to significantly reduce water usage. A standard shower can use up to 15-20 liters per minute.

**Turn Off Taps:** Avoid letting the water run while brushing teeth or washing dishes to save gallons of water daily.

**Reuse Household Water:** Implement systems to recycle greywater from sinks (while washing produce) and washing machines for irrigation and toilet flushing. Collect water while it is warming up and this can be used to water plants.

## 2. Water-Efficient Fixtures:

**Install Low-Flow Devices:** Use low-flow showerheads [https://greenbuildingcanada.ca/air-infusion-shower-heads/?utm\\_source=convertkit&utm\\_medium=email&utm\\_campaign=The+Envelope+Please.+Why+Canadian+Buildings+Live+or+Die+by+Their+Skin+-+21009203](https://greenbuildingcanada.ca/air-infusion-shower-heads/?utm_source=convertkit&utm_medium=email&utm_campaign=The+Envelope+Please.+Why+Canadian+Buildings+Live+or+Die+by+Their+Skin+-+21009203), faucets, toilets and bidets to minimize water consumption without sacrificing performance. For information on rebates go to: <https://www.regionofwaterloo.ca/en/living-here/reducing-water-at-home.aspx>

## 3. Rainwater Harvesting:

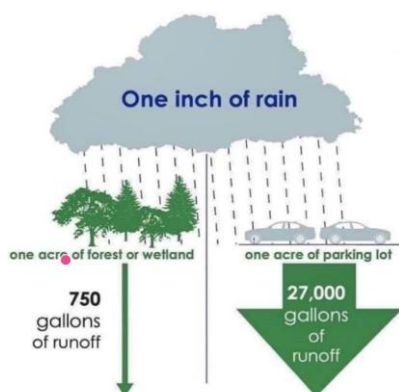
**Collect Rainwater:** Systems that capture and store rainwater for irrigation and non-potable uses, help to reduce reliance on municipal water supplies. An above ground or inground cistern will offer water security, sustainability and conservation and over time, a cistern can lower water bills and provide a backup water supply for emergencies. [https://www.waterfarmers.ca/Using-Cisterns-for-Rainwater-Harvesting-in-Ontario|Ontario Agra](https://www.waterfarmers.ca/Using-Cisterns-for-Rainwater-Harvesting-in-Ontario|Ontario-Agra)

## 4. Sustainable Agricultural and Gardening Practices:

**Drip Irrigation:** Instead of using overhead sprinklers Implement drip irrigation (which is a surface or underground piping system to deliver water directly to the plant roots. This reduces evaporation and spread of water to unwanted areas.

**Crop Selection:** Choose drought-resistant crops that require less water, helping to conserve water resources in farming.

## 5. Plant Trees:



Trees are essential for managing water by regulating the water cycle, preventing soil erosion, improving water quality, and mitigating floods. A mature tree in your yard, in a rain event, can collect up to 400-500 liters (4-5 rain barrels) which slows down flooding and slowly lets water go into the soil and eventually the water table. <https://extension.psu.edu/the-role-of-trees-and-forests-in-healthy-watersheds> <https://treecanada.ca/urban-forestry-guide/stormwater-management/>

*Consider planting trees in your yard and volunteering with tree planting projects in your community.*

## 6. Green Roofs & Green Living Walls & Permeable

pavers:

**Green Roofs:** <https://youtu.be/XSu0rqISe0g?si=fyGKUozqIFet5Opt>

<https://greenbuildingcanada.ca/guide-to-green-roofs/> <https://zinco-greenroof.com/>  
<https://www.greenroofs.org/about-green-roofs#:~:text=AestheticImprovements>

**Green Living Walls:** <https://terra-design.ca/green-living-walls/>

**7. Permeable pavers:** <https://www.numberanalytics.com/blog/permeable-pavement-green-building-leed>

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## The following links provide great water-conservation strategies at home

**How to cut your water use in half - ideas from Consumer Reports:**

<https://nvecoboosters.com/wateruse.pdf>

**Region of Waterloo:** This educational link offers **free programs and resources** (If your average monthly water use is 5.5 m3 of water per person or higher, you're eligible for a free home water review) including our indoor water savings tips sheet and outdoor water savings tips to help.

<https://www.regionofwaterloo.ca/en/living-here/reducing-water-at-home.aspx>

<https://solartechonline.com/blog/water-conservation-at-home-complete-guide/>

<https://greenbuildingcanada.ca/save-water-home/>

**Make every drop count: Water Conservation Tips from the David Suzuki Foundation**

<https://david Suzuki.org/living-green/make-every-drop-count-water-conservation-tips/>

**Tips for Water Smart Landscaping** <https://site.extension.uga.edu/paulding/2021/08/getting-started-with-water-smart-landscaping/>

**Green Building Canada** <https://greenbuildingcanada.ca/green-building-guide-water-efficiency/>

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## Links and YouTube videos about where water in our region comes from and how it is treated

Our keynote speaker **Hugh Simpson** co-created the following resource "**Understanding Groundwater**". Though it was specifically prepared for farmers, rural residents, it's great information everyone. <https://www.ontario.ca/page/understanding-groundwater>

YouTube **I Am Groundwater journey to tap** :57 [https://youtu.be/hp7wSDsbu\\_0?si=iroUll21FiTy42ts](https://youtu.be/hp7wSDsbu_0?si=iroUll21FiTy42ts)

YouTube **Mannheim Water Treatment Plant Tour** 11:00

<https://youtu.be/envsveUxDh8?si=pzR3B6voyHfpZD6F>

YouTube **Tour Kitchener Waste water Plant** 8:38

<https://youtu.be/H7gmADzckwQ?si=Z9Ck4xbaytKDF4UJ>

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## Water Conservation for Kids

Top10 Tips for Saving Water <https://www.youtube.com/watch?v=5J3cw4biWWo>

## Fun Activities to Learn About Water Conservation

- Create a Rain Gauge: Help kids make simple rain gauges using plastic bottles to measure rainfall. This teaches them about precipitation and the importance of water.  
<https://youtu.be/U4H4z8k2sfE>
- Water-Saving Detectives: Turn water conservation into a game by having kids check for leaks around the house. They can use clipboards and checklists to make it fun.
- Plant a Drought-Resistant Garden: Involve kids in gardening by selecting native plants that require less water. This teaches them about sustainable landscaping.
- Purchase a Rain Barrel: Set up a rain barrel to collect rainwater for watering plants. Kids can decorate the barrel and learn about rainwater harvesting.
- Get a group of kids together and borrow the Nith Valley EcoBoosters **“Water Game”**.

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