

Spruce Grove Water Conservation Quiz Game

Introduction:

Water conservation is an important component of **climate adaptation** for Spruce Grove. Sustainable water management at home and throughout the City will enhance the resilience of regional infrastructure and natural assets to changing water conditions, including droughts and increased stormwater flows.

Water conservation at home can have a significant environmental and economic impact. Reducing overall water consumption **conserves energy and resources** and helps mitigate the need for the expansion of water treatment and wastewater management infrastructure. Reducing demand for water also **enhances regional resilience against increasing drought conditions** with increasing climate change.

Instructions:

1. Print out the cards double sided and cut them out
2. Shuffle the cards into a deck or lay them out with the question side facing up
3. Quiz yourself or others and flip the card over for the answer



How many litres of water does a typical bathtub hold?



What percentage of Earth's water supply is freshwater?



How much water can a leaky toilet waste in a day?



On average, how much fresh water do Canadians use every day?



What percentage of water is usually lost to leaks in North America?



How much do you think an undetected leaky toilet could cost over a month?



How much water can you save by showering instead of taking a bath?



How much water could you save in a day by turning off the tap while brushing your teeth?



Less than 3% of Earth's water is freshwater

Source: National Geographic



The average bathtub holds 300 L of water

Source: The Bathroom Blueprint



215 L per day

Source: Statistics Canada



A bad leaky toilet could waste 10 L/minute or about 14,000 L in a day

Source: EPCOR



A leaky toilet that goes undetected for a month could cost more than \$1,000

Source: City of Spruce Grove



About 12%

Source: EPCOR



Up to 36 L per day

Source: Environmental Protection Agency



You can save up to 273 L of water by taking a shower instead of a bath

Source: Environmental Protection Agency



How much water does a 5-minute shower with a water-efficient showerhead use?



How much water does a standard showerhead use per minute?



How much water does a high-efficiency washing machine use per load?



How much water does an Energy Star rated dishwasher use per load?



How much water can a leaky faucet waste in a year?



Which uses less water: watering your lawn in the morning/evening or midday?



With climate change, will Spruce Grove face increased water stress?



What is the largest contributor to a person's water footprint?



A standard showerhead uses approximately 11 L of water per minute

Source: Environmental Protection Agency



A 5-minute shower with a water-efficient showerhead uses around 45 L of water

Source: Environmental Protection Agency



A standard Energy Star rated dishwasher uses around 18 L of water per load

Source: Direct Energy



A high-efficiency washer has an average water usage of 64 L

Source: Energy Star



Watering your lawn in the morning or evening uses less water due to lower evaporation rates

Source: City of Spruce Grove



A small drip could waste 27,000 L of water per year if left unattended

Source: City of Spruce Grove



Food

Source: Watercalculator.org



Yes. Water stress and increased drought risk are projected for Spruce Grove

Source: City of Spruce Grove



How much water can an aerator on a faucet save?



What are two ways you can save water in your garden?



How can you save water when using a dishwasher or a laundry machine?



What percentage of water use is typically just used outside the house?



What are some of the benefits of using a rain barrel?



How much water does a low-flow toilet use per flush compared to a standard toilet?



What is grey water?



Where does Spruce Grove's drinking water come from?

A

Watering before 9am reduces evaporation and using a soaker hose instead of a sprinkler

Source: CMHC

A

An aerator will reduce the flow of water by 25% to 50%

Source: Capital Regional District

A

Approximately 30% of water usage is for outdoor use

Source: EPA

A

Only run your washer and laundry when they are full

Source: Spruce Grove

A

A low-flow toilet (common in homes built or remodeled after 1994) uses as little as 6 L compared to the standard 19-26 L per flush

Source: watercalcualtor.org

A

Using a rain barrel saves money and reduces freshwater use

Source: City of Spruce Grove

A

Spruce Grove's drinking water comes from the North Saskatchewan River

Source: Spruce Grove

A

Grey water is gently used water waste from bathroom faucets, showers, and laundry

Source: Capital Regional District



What percentage of global water consumption does agriculture use?



What percentage of humans will experience water scarcity by 2025?



What rank is Canada in the most water use per capita?



How much water evaporation is saved by using a pool cover?



What is the definition of water scarcity?



How much has global water use increased in the last 40 years?



How much of the water used in agriculture returns to its original source?



How many litres of water does it take to water a 90 sq. metre lawn annually?



66% of people will experience water scarcity

Source: United Nations



90% of water consumption is agricultural

Source: FAO



90-95% of water that evaporates from a pool can be saved with a pool cover

Source: EPA



Canada ranks 20th for country with the highest per capita water use

Source: Worldometer



Water use has quadrupled while the population has only doubled

Source: BBC



Water scarcity is the lack of sufficient water to meet the needs of humans and the environment

Source: United Nations



A 90 sq. metre lawn uses 160 000 L of water annually

Source: EPA



Only 17% of agriculture water returns to its source

Source: Canadian Geographic