

Water in Canada

<https://www.canada.ca/en/environment-climate-change/services/water-overview/publications/water-in-canada.html>

1. Is Canada a "water-rich" country? Explain.
2. Is the water that flows into the oceans from lakes and rivers wasted? Explain.

How Society Pollutes Water:

There are many different approaches to classifying water pollutants. Go to:

http://oceanservice.noaa.gov/education/tutorial_pollution/welcome.html

1. What are *Point Source* pollutants?
2. What are *Nonpoint Source* pollutants?
3. How are each of the following categories sources of water pollution?

Urban and Suburban Areas:

Agricultural Operations:

Atmospheric Inputs:

Forestry and Mining Operations:

Marinas and Boating Activities:

4. Describe the following pollutants from nonpoint sources:

Nutrients:

Suspended Sediments:

Pesticides and Toxic Chemicals:

Bacteria, Viruses, and Trash:

In order to protect our local aquatic ecosystems and to reduce the risk of harmful pollutants contaminating our water, the government has developed water quality guidelines for surface water, and for drinking water. The better the source water quality is, the healthier our ecosystems are, the healthier we are, and the easier it is to treat our drinking water.

Our Drinking Water

Visit the website:

<https://www.saskatoon.ca/services-residents/power-water/water-wastewater/drinking-water/water-treatment-plant>

as well as the links on the site to explore Saskatoon's Water Treatment Plant, and how it provides us with safe drinking water.

1. Using the information given describe the operations and effectiveness of technologies and processes that are used to protect our drinking water.

Current Issue

Water contaminations can be a major problem for local communities.

Choose from the list of topics below and visit the website with an article related to that topic. Once you have read the article, use it to answer the questions

2. For the article of your choice answer the following questions:

- what type of pollution is your topic?
- how does the topic of your article present a problem to the aquatic ecosystem?
- how does the topic of your article present a human health problem?
- how does your topic relate to Saskatchewan's Surface Water Quality Guidelines and/or to the community's Drinking Water Quality Standards?

Water-born disease:

<http://calgaryherald.com/opinion/columnists/adams-calgarian-sees-impact-of-life-saving-water-filter>

Blue-green algae:

<http://www.cbc.ca/news/canada/hamilton/news/go-aboard-the-floating-lab-chasing-great-lakes-algae-blooms-1.3026684>

Pesticides:

<http://www.cbc.ca/news/pesticides-pollutants-threaten-canadian-tap-water-researchers-suggest-1.744304>

Fracking Chemicals:

<http://globalnews.ca/news/728475/u-s-fracking-study-says-chemicals-dont-contaminate-drinking-water/>

E.Coli:

<http://www.cbc.ca/news/canada/inside-walkerton-canada-s-worst-ever-e-coli-contamination-1.887200>

Sewage/Coliform Bacteria:

<http://www.cbc.ca/news/canada/saskatchewan/98-year-old-sewer-line-under-repair-in-saskatoon-1.789985>

OR find your own article and include the link at the bottom