

BLUE COMMUNITY STUDENT ENGAGEMENT



An invitation to all educators who wish to engage with their students on why water is a human right, shared commons, and sacred gift.

The Federation of the Sisters of St. Joseph of Canada became a Blue Community in 2017 and we activate our pledge through education. In 2020, we made a poster called **One River, Two Futures: reflections on water** and shared it with schools and water education organizations. In 2023, we revised the poster and created this companion kit so that educators can dive into the issues with more context and critical questions.

The subject of water touches upon all the disciplines and so this kit is designed to offer the educator the dual benefits of context and classroom supports. This kit offers a vision of **water protection** (water quality), **water kinship** (our shared and sacred connections), and **water justice** (inequalities to water and decision making).

How can education build bridges towards the water future we want?

This guide zooms into the poster's six thematic parts. This is followed by an extended resource section making further ties to grades, subjects, and school locations. Designed for both elementary and secondary schools, this guide gives teachers a summary of the issues while grounded in current research and critical thinking. This is a digital resource with many embedded links. Underlined text links you to our sources of information. An image of the full poster is on the final page.

To get copies of this poster (24 X 36 inches), download this companion kit, or to send your feedback for updates in the years to come, please visit our website:

BlueCommunityCSJ.org

WATER FOR ALL

When you turn on your taps, where does the water come from? It might come from either a well (if living in a rural area) or a municipal water pipe (if living in town), but where is its source -- its origin?

Can you name the water body (the river, lake, groundwater) that flows through your taps?

We live on a blue planet. Three-quarters of the earth is covered by water, but only 0.3% of this water is available for human use. That's because 97% of the earth's water is saltwater and most of the remaining (3%) freshwater is locked far underground and in glaciers.

The human right to clean water and sanitation is one of the United Nations Sustainable Development Goals. 1 in 10 humans (771 million people) do not have access to clean drinking water with 1.7 billion people (1 in 4) lacking access to a toilet. As a student, it's important to know that globally, 1 in 3 schools lack access to basic water and sanitation.

We are always connected to water, but our sense of connection is often missing. Our food, transportation, energy, housing, health, and manufacturing systems are all dependent on water. Over half the human population lives in cities and finding the right balance of human and non-human needs is vital to our collective futures. Let this poster strengthen our sense of connection.

What impacts do one or more of the systems listed above have on the waters near you?

Our Blue Community program promotes water as a shared commons because we never own water, but we share it with all of creation and we borrow it from future generations. We need laws and ethics that govern water as a shared commons so that water can be clean, accessible, and sustainably used to promote wellness for all.

Where is your closest and safest place to swim? [Check out the Swim Guide](#) to learn about local beaches and water quality.

Where can you get free and safe drinking water at your school or in your community? [Check out these maps](#) of where to refill your water bottle.

Do you trust the quality of your tap water over the quality of bottled water?

Did you know that tap water is tested much more vigorously than bottled water? Make a comparison chart [using this public health information](#).

Water is not just for our uses, but sustains all life on earth. "We forget that the water cycle and the life cycle are one." Jacques Cousteau (underwater sea explorer)



CELEBRATE WATER

The search for life in the universe is often marked by one variable -- water. Finding water is associated with finding life because water is the source of life, not just a resource to be used.

We are water. Our bodies are about 60% water. Each of us is born into a womb of water with our body's salt percentage (0.4%) very close to that of the oceans' salt concentration. What we do to the water we do to ourselves.

Think about how and where water flows in your watershed. Grab a map and start drawing arrows to highlight this awareness. Where might this water have been 4 days ago or 4 days from today? After about 4 days your body's water matches the water you ingest from eating and drinking. Let yourself feel more connected to a larger watershed.

In 2012, Canada signed the United Nations declaration on the human right to safe drinking water and basic sanitation. This is not just a problem in poorer countries, since (as of February 2023) there are still 32 Drinking Water Advisories in Canada on First Nations reserves (down from 138 in November 2015). These statistics don't give justice to the complexity of the issue and the human impact because there are long and short term advisories, inconsistent guidelines for water quality, poor housing conditions, and contaminated water sources that used to be pristine.

There are also our individual and collective responsibilities to water. We can compare water rights to responsibilities and also learn about Indigenous water responsibilities led by women.

Is there a special day or time of year that you or your culture celebrate the gift of water? If so, how does this practice deepen your relationship with water? If not, why and what might a practice of gratitude look like?

Singing is a great way to honour water. What songs do you know that celebrate the sacred gift of water? Listen and sing along to these 2 songs to get started:

[Nibi \(water\) Song](#) By Dorren Day
[Bottle This!](#) By Evalyn Parry

How clean is your tap water and why is this so? What are some of the nearby communities to you that have a drinking water advisory?

What responsibilities do you have to water?

How do Indigenous water teachings differ from non-Indigenous teachings and how do these systems of knowledge overlap with each other?



STAY CURIOUS

“Attention is the doorway to gratitude, the doorway to wonder, the doorway to reciprocity.”

These are transformative words from author and educator, Robin Wall Kimmerer. Her book, *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge, and the Teachings of Plants* has now been adapted into a version for young adults.

Nature Deficit Disorder is a term used to describe the growing concern and impact on people (especially children) who spend very little time outside. Ontario Parks now promotes the mental health benefits of being in nature, while there’s also a growing trend for health care workers to prescribe being in nature for wellness.

70-85% of wetlands have been lost in southern Ontario due to development. It’s hard to protect vital ecological systems that provide habitat, regulate water levels, and filter water when people don’t know the benefits of wetlands and the threats to their destruction. Wetlands are just one of the many critical elements needed for healthy watersheds.

The Toronto Region Conservation Authority offers a wetland education program and Natural Curiosity works across Turtle Island to strengthen the importance of Indigenous perspectives for children’s environmental inquiry. See the many resources at the end of this education kit that link you to ideas, practices, and projects that stimulate student attention toward their watersheds.

What are some of the names of the waterways, plants, animals, and insects around you? How do these waters and our non-human neighbours change their patterns throughout the four seasons of Spring, Summer, Fall, and Winter? How has your local environment changed over the past 10, 50, and 100 years?

The Indigenous names of places, plants, and animals often reveal deeper knowledge. Do you know any of the Indigenous names (Anishinaabemowin, Mohawk, Cree, etc.) for any of the waters and life forms around you? Learn about the birch bark tree from an Anishinaabe perspective.

Have you been on the water close to where you live (in a kayak, canoe, sailboat, motorboat, ferry, etc.), how clean was the water, and are there many places to access the water with a boat?

What are some of your fond memories when sitting around a campfire, fishing, boating, and exploring?

How do you feel when ‘unplugged’ from home, the classroom, wifi, and concrete places?

Are there fish in our local waterways and are they healthy to eat?

The earth gives us all we need for wellness. What do you do (or could you do) to reciprocate the gift of water?



CITY FOR SALE

Municipal water systems are usually out of sight and out of mind and thus have been underfunded for decades. In Ontario, municipal water infrastructure (potable water, storm water and wastewater systems) is valued at \$229 billion. But when the [Financial Accountability Office of Ontario](#) looked at the backlog of needed spending, it determined that \$16.4 billion more dollars are needed to keep these systems in a good “state of repair”.

How is your drinking water protected from contamination? Contact your municipal government to learn more and try to take a tour of the local waterworks buildings where you live. Ask questions about how the water is treated before and after you use it.

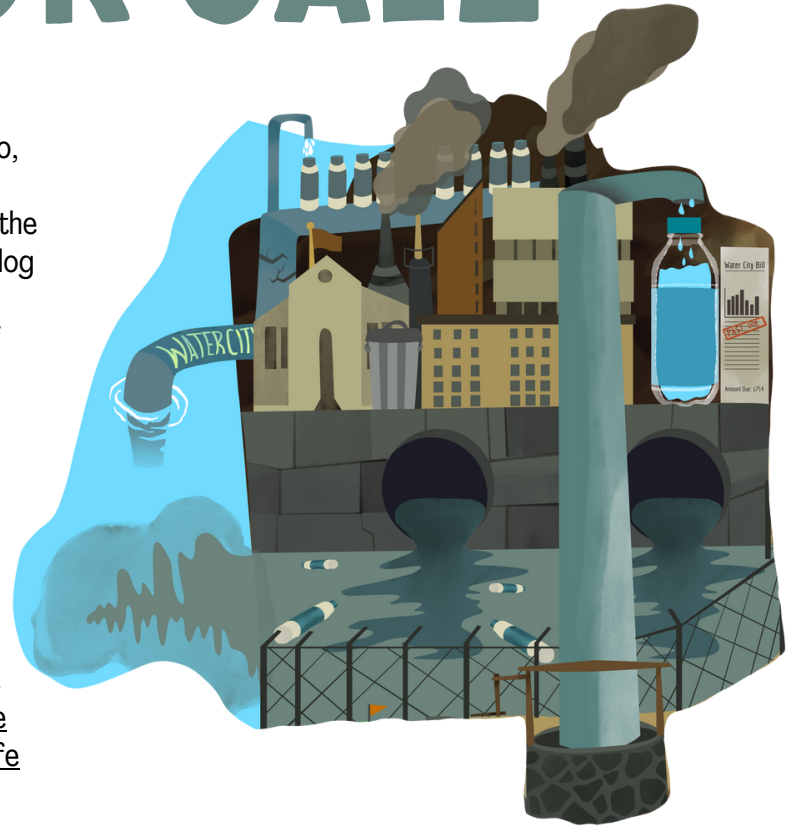
Water is the first medicine and investments in water protect public health. For example, in 2019, there was a [Canada-wide investigation](#) into lead levels in tap water since there is no safe level of lead in drinking water. The infrastructure backlog doesn't include costs for adding capacity, functionality, or performance. It would cost a lot more than \$16.4 billion to improve the quality of water we consume and discharge and to also service Ontario's growth which is expected to add another 6 million people over the next 20 years.

What upgrades does your water system need to improve water quality at the tap and when discharged into the watershed? Contact local environmental organizations, such as a [Conservation Authority](#) to learn more.

Where will this additional investment come from? Some will look to privatization as the solution in which public assets (government owned) are sold to private companies or private money is used to invest in and operate water infrastructure, but only for a profit. International examples prove that the profit motive does not mix well with high water standards and the need for universal public access -- in fact it's a failure. Blue Communities is an initiative to ensure water is treated as a shared commons, not a private commodity.

What would you do if you couldn't drink the tap water or couldn't afford to pay much higher water bills?

Is your community a Blue Community? If so, how is this impacting your access to clean water and if not, what opportunities might exist for change? Check out the [Blue Community](#) page to get started.



More than 80% of people in Ontario get their drinking water from municipal water infrastructure (water intake, treatment, and piping into homes). The remainder use private sources like wells (for groundwater) or get water directly from lakes and rivers. Sewage is either treated at a centralized plant or through septic systems that break down harmful bacteria. But it wasn't always this way.

Buildings in early Canadian cities (Hamilton, Toronto, etc.) had no central plumbing and people piled up their sewage in buckets which was then dumped onto roads and into local waterways. Not surprisingly, water-borne diseases like cholera and typhoid killed many people and starting in the mid 1800's cities started to build public water infrastructure. Different materials were used in these public waterworks systems starting with stone, wood, and clay and were eventually replaced with lead, concrete, steel, and plastic.

COMMODIFY WATER

In February 2023, the top 2 global sources for best municipal tap water were right here in Canada. Even with the investment gap described above, Canadian municipalities are world leaders in cleaning and piping tap water. So why is bottled water so popular?

In 2015, Canadians spent 3.28 billion dollars on bottled water. Less than half of these bottles are recycled (the rest are in landfills and littering walk and waterways), and yet Canadians spent even more in 2022 for the convenience of packaged water – 4.46 billion dollars in total. This works out to about 2 billion single use plastic bottles every year with each bottle requiring the equivalent of 3 bottles of water and 1/4 of a bottle of oil to produce this commodity.

Math and science students can calculate total volumes of precious water and fuel and help us understand the CO2 impacts of this industry at a time of climate emergencies.

Bottled water is 4,000 times more expensive than tap water and has twice as many microplastics in it than tap water. Globally, 1 million bottles are used every minute resulting in the dire prediction that in 2050 there will be more plastic in the ocean than fish (by weight). We know about the ecological impacts of this business, but where does the money go?

Bottled water costs more than gasoline. Most brands are filtered tap water with Aquafina (Pepsi) being Mississauga water and Dasani (Coke) being Brampton water. The biggest brand of bottled water in Canada is Nestlé (produced by Blue Triton) and this water comes from 2 wells near Guelph Ontario (Aberfoyle and Hillsburgh). A large part of that 4.46 billion dollars Canadians spend on bottled water goes to these 3 multi billion dollar companies who get this water for almost free. Blue Triton inherited Nestlé's Provincial permit to take water when Nestlé sold its operations in 2021. Blue Triton now pays just \$503.71 for a million litres of groundwater. This 9 minute video explains how this is all possible.

The Story of Bottled Water is a true tragedy of the commons as governments sell off shared natural gifts for private gain, while leaving the world full of plastics and pollution. Most of Canada is a country built on Treaties – agreements to share the lands and waters. Ontario gives water permits without the consent of First Nations. For example, the Haudenosaunee Confederacy Council gave Blue Triton (just like Nestlé before them) a cease-and-desist order because consent was never given for the 5 year permit to take 8 billion litres of water, package it, and sell it around the world.

What actions have you taken (or could you take) to reduce your use of single use plastics?

What kind of changes (values, perceptions, rules, resources, incentives) are needed to keep water for life and not for profit?

If you or your school buys bottled water, where does the water come from (check the label)? What do you know about this watershed and the Treaties that should govern our relationships to this watershed?

When reviewing bottled water advertisements and the labels on the bottles, what information is missing or misleading? What emotions do these ads highlight?



PAY TO PLAY

When we lose touch with the knowledge and experience that the water cycle is the life cycle, access to clean water becomes only for those who can afford it. Rather than a shared commons, we have private access based on payment and property rights.

Water pollution from excessive dumping of our industrial, residential, and agricultural wastes is not only unhealthy, but lonely. We become separate from larger living systems that feed our physical, emotional, spiritual, and mental wellbeing.

This separation has many negative consequences, including grief. Talking about ecological grief coupled with taking individual and collective action is a healthy and honest way to engage with water issues at the local and global levels.

Integral Ecology emphasizes the need to care for water as a "Creation-relative" while also protecting the rights of people. It urges us to pursue social, cultural, political, economic, spiritual and environmental objectives together, rather than separately, so we might move toward wholeness. Learn how to look at water through the lens of Integral Ecology with this resource by Sue Wilson, CSJ Office of Systemic Justice.

What emotions are activated in this scene?

What type of relationship with water does someone have when they leave their garbage behind or don't take responsibility for cleaning up their pollution?

Where do you see plastic water bottles discarded outside and how often?

What efforts exist in your school or in your watershed that need more support?
This can be your watershed at the local, regional (i.e. Great Lakes) or global level.

How can each of your school subjects share insight and connection to water issues, while motivating individual and collective action?

What does it mean to be a "good ancestor" in today's world that integrates the dreams of those who have gone before us and the needs of future generations?

The United Nations has identified clean water and sanitation as a key Sustainable Development Goal. There are many targets for the year 2030.

Take a look at the list and learn how you could help with one of these goals.



MORE RESOURCES

TEACHER GUIDES & PROGRAMS

26 Teacher's Guides on water topics including: bottled water, dams, fish, coral reefs, oceans, climate change, municipal water, and more.

Earth's Freshwater, Grades 3-6, Earth Sciences

Turtle Guardians has curriculum support for K-8 grades

Peterborough area: Wonders of Water kits to rent for science, technology, conservation, and protection

Water First resources for K-12 students, include multiple hands-on STEM workshops that explore custom curricular and local water science concepts.

Grade 7 & 8 WaterDocs At School Program, media making.

Listening to Indigenous Voices: a dialogue guide on justice and right relationships, produced by the Jesuit Forum for Social Faith and Justice

TRACKS (TRent Aboriginal Cultural Knowledge and Science) facilitates dynamic, land-based youth programming that braids multiple scientific approaches by centring Indigenous ways of knowing and being.

Safe Water Drinking Foundation, Grades 4-12, in English, French, and Cree

Peterborough Children's Water Festival

Giant floor map exploring freshwater and the oceans by Canadian Geographic

Sudbury: Junction Creek Stewardship Committee offers free, bilingual, hands-on educational learning opportunities to engage youth of all ages in the continued restoration of the Junction Creek watershed.

School and group activities, Early Years to Senior, Pathway to Stewardship & Kinship

Treaties and the Treaty Relationship Educational Package

The Council of Outdoor Educators of Ontario, classroom teachers tools

Project WET: water education today, teacher resources

Nature Discovery Programming for students, Watersheds Canada

CATHOLIC VOICES

Laudato Si' Action Platform

Our common home: A guide to caring for our living planet.

Aqua fons vitae: orientations on water by the Dicastery for Promoting Integral Human Development

Sisters of St. Joseph of Toronto, School Visits for Living Laudato Si', Integral Ecology, and Vocations and Spirituality

CSJ BLUE COMMUNITY BLOGS

Water as a Human Right: water access is divided both locally and globally

Indigenous Legal Systems to Protect Water

Safe Drinking Water For All: 20 years after the Walkerton Inquiry and how our water systems in Ontario have improved (or not)

Changes to Canada's Recycling and Plastics Policies: what's banned and what's polluting the world's people and places

EXPLORE MORE

Get to know your water

Indigenous water teachings. Water is a relative, threatened, life, language, community, knowledge, law, sacred, and sovereign.

Children's Groundwater Festival & Groundwater fact sheet

Questions & Answers about Bottled Water

Building Rain Gardens

Actions Students Can Take

United Nations Sustainable Development Goals

Why lakes and rivers should have the same rights as humans, 13 minute video with resources by Kelsey Leonard

One River, Two Futures

REFLECTIONS ON WATER



When we **respect water as the source of life**, this invites our acts of gratitude and reciprocity.

When we realize that we are only one part of a much grander watershed, our actions have the power to regenerate the living earth. The waters do not 'belong' to us, **we belong to the waters**.

When we protect water for all creation and for generations to come, we affirm the human right to water and our **responsibilities to this sacred gift**.

When we **strive for the common good**, we recognize that everything we do impacts water. Our shared systems that provide energy, food, transportation, recreation, manufacturing, and housing all need to be aligned with protecting water.

WHAT IS YOUR RELATIONSHIP TO WATER?

When governments allow water to be sold, water becomes a commodity. Water traders make millions, while society's most marginalized are forced to go without. **Water is for life, not for profit**.

When people are denied access to clean drinking water and sanitation because these basic needs are too expensive or too polluted, **there is no water justice**.

Our Blue Community program reflects the Congregations of Sisters of St. Joseph's (CSJ) commitment of unity and reconciliation. We honour our responsibilities to protect water as a **human right, shared commons, and sacred gift**.

Through reflection, education, advocacy, and service, this program centers and strengthens our respectful relations to all the waters **circulating our common home**.

