

Session 4

Watersheds In Distress

Learner's Guide



Learn more about practices that are causing serious damage to our watersheds, and threatening the health of our fish populations and drinking water.



Today's Big Question: How is our watershed being harmed?

Introduction

Since before recorded history, people have made use of things on our planet, such as:

- › Wood, earth, and metal for building
- › Plants and other animals for eating
- › Fibres for making clothes

Some people call these Earth's natural resources. Over time, people began not only making things from natural resources for themselves and their own needs, but also making things to trade for other things, and eventually, for money. There seemed to be such an abundance of resources that not many people considered whether we should be more careful about what and how we were doing things.

Many Indigenous cultures understand Reciprocity—that we (people) receive from nature to survive and thrive. However, for the Earth to stay healthy and abundant, we also need to take care of, and give back to, nature. Our choices, behaviours, and technologies now cause larger scale ecological damage in shorter periods of time. We are seeing harmful impacts on our planet, including experiencing limits to resources we once thought were endless.

Our watershed is one place where we see these impacts. You may notice that the features and flow of a watershed are quite different, depending on what is happening in the surrounding area. For example, in the higher, more mountainous parts of the watershed, there are fewer houses and towns. These areas are more natural, and watershed features like streams and slopes haven't been altered drastically. However, they could be impacted by activities such as forestry and mining.

Healthy riparian areas, the strip along freshwater ways, are critical to the wellbeing of all the plants and animals that occupy them.

Photo: Genevieve Singleton





Activity 1: Identifying Impacts on the Watershed

We are going to dive deeper into how our watersheds are being harmed by exploring this session's vocabulary in small groups.

Your Words and Terms

You will learn more about these human activities and their consequences by exploring the following terms:

- › Deforestation
- › Contaminants
- › Run-off
- › Phosphorus
- › Nitrates
- › Invasive species
- › Reciprocity

In your group, research your vocabulary word(s) and prepare to share what you have learned with the class, using the following method:

Steps

1. Research the terms: create a bulleted list of key notes defining your word or term and how it impacts the watershed.
2. Think about a simple image that demonstrates your word.
3. On a piece of chart paper:
 - › Put your word or term in big letters at the top
 - › Draw your image on the left side of the paper, leaving room on the right.
 - › Write your bullets notes on the right side of the paper.
4. Share with the class!

On the following page there is a table for you to draw and record what you learn about other groups' words and terms as they share. One side is for the image and one for the bullet notes. Don't forget to label with the word or term itself.

My word or term: _____ **Image:** _____

Key notes: _____

Word/Term:	Notes:
Word/Term:	Notes:
Word/Term:	Notes:
Word/Term:	Notes:
Word/Term:	Notes:
Word/Term:	Notes:
Word/Term:	Notes:



Activity 2: Watershed Wiz Quiz

Carefully take your group's chart paper and fold over the top part where you've written the word or term. Tape or pin your paper at the front of the room so everyone can see the image and bullet notes, but not the word or term itself.

Put your notebooks away and let the quiz begin!

When it's your turn, draw a word or term from the container and match it to the correct chart paper. When you get it right (maybe with a little help from your friends), read out the bulleted notes about the word or term you selected.



Activity 3: Watershed Reflection

Write or draw about facts and ideas that stood out for you in today's session about watersheds. Include your thoughts on what you've learned.

In your reflection, touch on the following themes:

- › Threats to our watersheds
- › How threats to the watershed impact our drinking water
- › How a damaged watershed harms fish species, such as salmon

Watershed Reflection: *Watersheds In Distress*

Notes
