

Session 1
Watershed Detectives
Learner's Guide



What happens when the natural flow of a watershed meets the areas of land where people have established and expanded towns and cities?



Today's Big Question:

What is our direct connection to the watershed?

Introduction

Welcome to this learning project. It is called *Best Water Ways*, and it is about watershed literacy, stewardship, and restoration. It is focused on the exploration of our place in the world, through inquiry, research, and local hands-on projects.

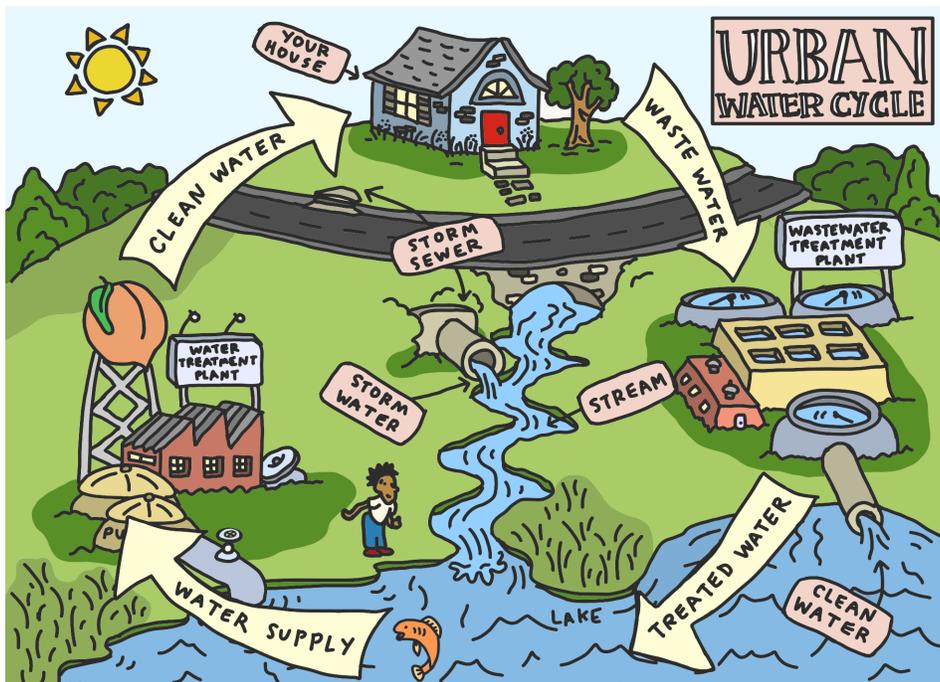
What is a watershed?

Do you know that you live in, and are an active part of a living system? It is called a watershed. We will explore the big picture of watersheds in future sessions, but today we are going to focus on your connection to your watershed. We are going to explore where you are right now, in the neighbourhood where you spend most of your time each day. You will not have to go far to find a clue that connects you to the watershed, even if there isn't a river, lake, or stream in sight.

Everywhere that rain falls, and water flows on the earth, is part of the earth's big water collection, storage, and distribution cycle. So, when you see drops hit the pavement outside your house or drip down the gutters of your home, you are in the watershed.

Watersheds are important to Indigenous peoples, as they offer food, medicine, and natural protection. A common belief held by many Indigenous peoples is that 'all things in life are connected'. This means that what we humans do impacts other parts of life around us, and that, in turn, has an impact on us.

What happens when the natural flow of a watershed meets the areas of land where people have established and expanded towns and cities? Complete the following *Watershed Detective* activities to explore this question.



Source: Diane Kelment,
Watershed Learning Network,
University of Georgia:
[http://wln.ecology.uga.edu/
index.php/potentially-useful-images-
video-links/](http://wln.ecology.uga.edu/index.php/potentially-useful-images-video-links/)



Quadrant counting of eelgrass in a local estuary.

Photo: Stephanie Cottell



Activity 1: Watershed Detectives

In this activity, you are going to explore parts of the watershed closest to you and how you are connected to it.

Part I

Break into groups of two or three. In these groups, look up the session's words and terms (listed below) to prepare you for your detective work.

Your Words and Terms

Research each of the following words and terms. What do they mean?

- › Interconnectedness
- › Culvert
- › Ditch
- › Bridge
- › Dike
- › Impervious or Impermeable
- › Perimeter drain
- › Pervious or permeable
- › Storm drain

Part 3

After you return from your walk, each group will share what they have discovered. You will also compare what you have seen to the local maps provided by your teacher. Consider and answer the following questions:

1. How does what you have detected compare with what you see on the maps?

2. Do you notice any differences in where rivers and streams flow on the map compared to what you saw in your exploration? What are these differences?

3. How do you think the watershed might be affected by human activity in your area?

Labels for mapping *Watershed Detectives* discoveries

River	River	River
Wetland	Wetland	Wetland
Stream/Creek	Stream/Creek	Stream/Creek
Culvert	Culvert	Culvert
Culvert	Culvert	Culvert
Ditch	Ditch	Ditch
Ditch	Ditch	Ditch
Bridge	Bridge	Bridge
Bridge	Bridge	Bridge
Dike	Dike	Dike
Dike	Dike	Dike
Perimeter Drain	Perimeter Drain	Perimeter Drain
Perimeter Drain	Perimeter Drain	Perimeter Drain
Storm Drain	Storm Drain	Storm Drain
Storm Drain	Storm Drain	Storm Drain

