CANADIAN WILDLIFE FEDERATION

180 + minutes

Create a Watershed Display

Learning Objectives

Students will:

- Deepen their knowledge of watershed ecosystems.
- Explore human connections to watershed ecosystems.

Method

Students will plan, prepare and present a hands-on or digital display on a theme related to watersheds.

Materials

- Common art materials
- Equipment for digital presentations (e.g., video cameras, computer software, etc.)

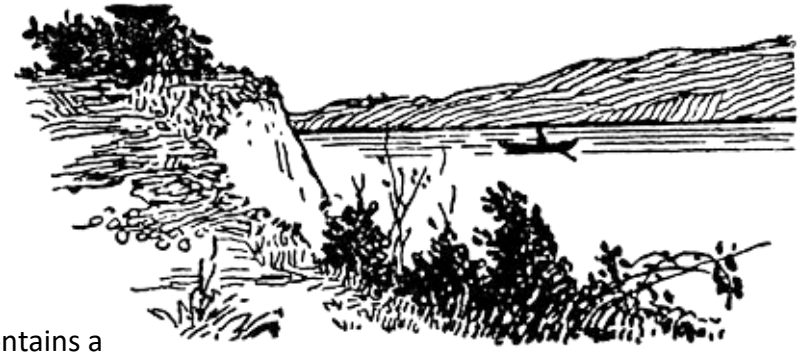
Background

No matter where you live, work or play, you live in a watershed. Wildlife lives there, too. A watershed is an area of land that water flows across or through on its way to a particular water body, such as a stream, river, wetland, lake or coast. Think of it as the land upon which precipitation (such as rain) fails and flows to a common, watery place.

You can tell watersheds apart by their boundary. Ridges (or high areas such as hilltops) form a natural boundary from which water drains either toward or away from a particular watershed. Some watersheds are tiny, only a few hectares in size. The largest cover millions of square kilometres.

Canada has five main watersheds:

- The Arctic
- The Atlantic
- The Hudson Bay
- The Pacific
- The Gulf of Mexico.



Each of these massive landscapes contains a network of sub-watersheds, most of which are connected through configurations of tributaries (streams and rivers) that channel water to an ocean.

For additional resources visit:

CanadianWildlifeFederation.ca/Education

Activity

1. Choose a Theme

Canada's watersheds are diverse and fascinating! We suggest students focus on getting to know their local watershed as a starting point.

Here are some suggested topics for each grade level:

Grades K—3

- Sharing space with animals and plants.
- Living things in the water and on the land.
- Wetlands in my neighbourhood.
- Water in my environment and where it flows.

Grades 4—6

- How an animal meets its habitat needs within my watershed.
- How we affect — and protect — our watershed.
- A community beneath the water (or at the shore).
- Wetland communities.
- Protecting endangered species in our watershed.
- Animal and plant adaptations to a local habitat.

Grades 7—8

- Interactions in an aquatic ecosystem.
- Balancing human and environmental needs within your watershed.
- Our connections to an aquatic ecosystem.
- Water on the surface and beneath the ground.

Grades 9 - 12

- The role of aquatic areas in maintaining ecological productivity.
- Comparing an aquatic and terrestrial ecosystem in our watershed.
- How wetlands provide ecosystem services and contribute to sustainability.
- Trace "our footprint" on our watershed.

2. Research, Plan and Prepare

Have students research their chosen theme for the display using local resources and the internet.

3. Select a Display Style

Encourage students to communicate their topic visually through colourful photos, artwork, crafts, infographics or videography.

Here are some suggested display styles:

- **Story:** As a class, deliver an important message through a simple, illustrated story. A theme such as "Protecting Habitats — Saving Endangered Species" will work well in this style. To create a simple storyboard, break the theme into subtopics, such as the description of the habitat; species that live there; threats to the habitat; what's being done; and what we can do. Have different students work on different parts of the display and the titles or captions.
- **Mural:** As a class, create a spectacular themed mural, with each student contributing one or more illustrated elements. A theme such as "A Wetland Community" works well as a mural.
- **Make it 3-D:** Hands-on displays could involve special crafts such as origami, "animal prints" and mobiles.
- **Collage:** Have students produce individual contributions to a collage display. The theme "Lakes, Rivers and Streams in My Community" works well in this style.
- **3-D model:** Have students make a three-dimensional model of their local watershed and the habitat of species that live there.
- **Large wall map:** As a class, show locations of water and land features (including different land uses by people) and then display information about these features on panels outside the map.
- **Presentations:** Encourage students to put their computer skills to work by creating slide shows or multimedia presentations.
- **Videos:** Have students videotape features of their local watershed and interview people on how they use the water and the land in ways that help maintain a healthy watershed.
- **Website development:** Have students build a website about their watershed that features practices that help sustain wildlife and people.

Encourage students to create displays that promote audience participation by including an interactive component, such as:

- Quizzes where answers to questions are revealed in fun ways
- Scavenger hunts where students search for items in a hands-on display or in a game on a website created by students
- A pledge sheet so people can sign up to do something to protect their watershed
- An interpretative pamphlet to guide students through a display on their watershed

4. Connect, Share and Celebrate!

Putting the final display together can be a rewarding activity. To maximize the exposure of your students' displays and messages, showcase them in busy location within your school.

- Have your students give their watershed an "interpretive tour" to younger grades or parents. They can explain their illustrations and deliver a message about what we can all do to protect our watersheds.

Evaluation

Evaluate students on their clarity (written work and presentation), creativity and the integration of their visual messages with the theme.