

## “DIY Shoreland Assessment” lesson plan

Duration: 20-30 minutes

Objectives:

- Students will understand the impacts of development on freshwater resources and how humans manage factors such as stormwater runoff and natural buffers.
- Students will make comparisons between developed and natural sites and explore the underwater impacts on wildlife communities.
- Students will identify and assess ways freshwater habitat and water quality can be enhanced and protected locally.
- Students will assess the impact of human activities on the environment, and analyze ways to mitigate negative impacts and contribute to environmental sustainability.

Background:

To implement local solutions, it is critical to identify and understand freshwater issues and their contributing factors. Students will explore the impacts of human development on freshwater resources to determine collaborative approaches to mitigate negative impacts, foster resilience, and contribute to environmental sustainability. This activity will help students build confidence and capacity to go out into the field, complete their own shoreline assessments, and identify actions they can collectively take to improve local water quality and shoreland habitat.

Materials:

- One “DIY Shoreland Assessment Activity” handout per student
- One writing utensil per student (pencil recommended)
- One clipboard (recommended)

Procedure:

1. Distribute a “DIY Shoreland Assessment Activity” handout to each student.
2. Working independently or in partners, have students brainstorm and answer the questions to complete the worksheet.
3. Facilitate a class discussion regarding their thoughts on which shoreland image appears healthier and more resilient. What are some critical features of a healthy shoreline? Why is a natural shoreland important for wildlife habitat, pollinators, water quality, and climate change resilience? What are some local actions that students can take part in to improve water quality and address freshwater issues in their community? How would you encourage others to change old habits, such as using fertilizers, chemical bug sprays, grass to the shoreline?
4. To extend and apply their knowledge, encourage students to go out “into the field” and complete their own shoreland assessment on a real-life waterfront property (like a cottage, boat club, or other property) to identify and assess actions they can take to enhance and protect local freshwater habitat and water quality.

Note: For an in-depth shoreline property self-assessment tool, visit [watersheds.ca/resources](https://watersheds.ca/resources) and download the free Lake Links Planning Committee's Lake Protection Workbook.