What is a Floodplain?

#FLOODED
Activity (60 – 90 minutes)
Grade Level: 5 – 12

Learning Outcomes

By the end of this activity learners will:

- Learn about a floodplain and watershed
- Explore where their school is located on a watershed

Length of Activity

1 – 1.5 hour

Materials List

Internet enabled device
Assessment Rubric
Flood:ED Backgrounder

STEP 1: What are Floodplains and Watersheds?

Begin by watching the following videos to understand what floodplains and watersheds are (10 minutes)

- https://www.youtube.com/watch?v=ButQspZX2yA
- https://www.youtube.com/watch?v=-PBT4OEJfGs

After watching the video, introduce the following definitions with your class (5 minutes)

- **Watershed:** an area of land where all the surface water drains into the same place, such as a stream, river, lake, or ocean.
- **Floodplain**: an area of low-lying ground adjacent to a river, lake, stream, or wetlands, formed mainly of river sediments and subject to flooding.

STEP 2: Floodplain Modeling Activity

In groups, complete the floodplain modeling activity with your class:

Materials Required:

- Internet-enabled device
- Assessment Rubric
- Flood:ED Backgrounder
- Locate My School on a Watershed Handout
- Aluminum baking tray
- Plastic cup
- Modeling clay
- Plastic tub
- Tape
- Construction paper
- Markers
- Scissors

- Watch this video to prepare for the activity. (5 minutes) https://www.youtube.com/watch?v=8dinLPba5iA
- Complete the activity as explained in the video. (30 - 45 minutes)

Additional resources for completing a floodplain modeling activity

- https://www.teachengineering.org/activities/view/cub_natdis_lesson07_activity1
- https://www.pbs.org/wgbh/nova/education/activities/2307_flood.html

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STEP 3: Where is Your School Located on a Watershed?

Find out where your school is located within a watershed.

- Begin by visiting the link: https://search.open.canada.ca/openmap/a4b190fe-e090-4e6d-881e-b87956c07977

Zoom into your city or town to find your watershed.

- Open Google Maps on a separate tab to locate your school in your city/town.
- Using the **Locate My School on a Watershed Handout** attached below, draw the boundaries of the watershed as found in the tool above. After you have drawn the boundaries of the watershed, locate your school on the map using Google Maps and draw it on the handout. Use proper labels and indicate a distance scale in the bottom right corner.

After you have found your school on the watershed and completed the sketch, discuss the following questions amongst your peers:

- Where does the water from your watershed end up? (a river, a lake, etc.)
- What organizations help manage your watershed? For example, in some areas Conservation Authorities are used. Which level of government is responsible for managing this water system? (is it local or municipal? Is it provincial? Or is it national - federal?

Additional Resources

Government of Canada – Understanding Watersheds
https://agriculture.canada.ca/en/agriculture-and-environment/agriculture-and-water/watershed-protection/understanding-watersheds

Flood Smart Canada – Flood Maps Listed by Province and Territories
http://floodsmartcanada.ca/floodplain-maps/

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LOCATE MY SCHOOL ON A WATERSHED HANDOUT

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