AQUATICS

Watershed Delineation Activity

Suggested Time: 30 minutes

Envirothon NB Learning Objectives

Recommended Grades: 6-12

Science Curriculum Connections

Concepts & Content

- Watershed
- Stream Order
- Topography
- Geography

SUSTAINABLE DEVELOPMENT GOALS

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

Science Skills Global Competencies

- Critical Thinking & Problem Solving
- Communication
- Collaboration
- Sustainability & Global Citizenship

Essential Question(s)

1. What is a watershed?
2. How do you delineate a watershed?

Virtual Workshop:

Watersheds & Aquatic Environments Video

Acknowledgements

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Questions?
Connect with a natural resource expert.
Contact us:

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(506) 457-2340 ext. 129

Suggested Time: 30 minutes

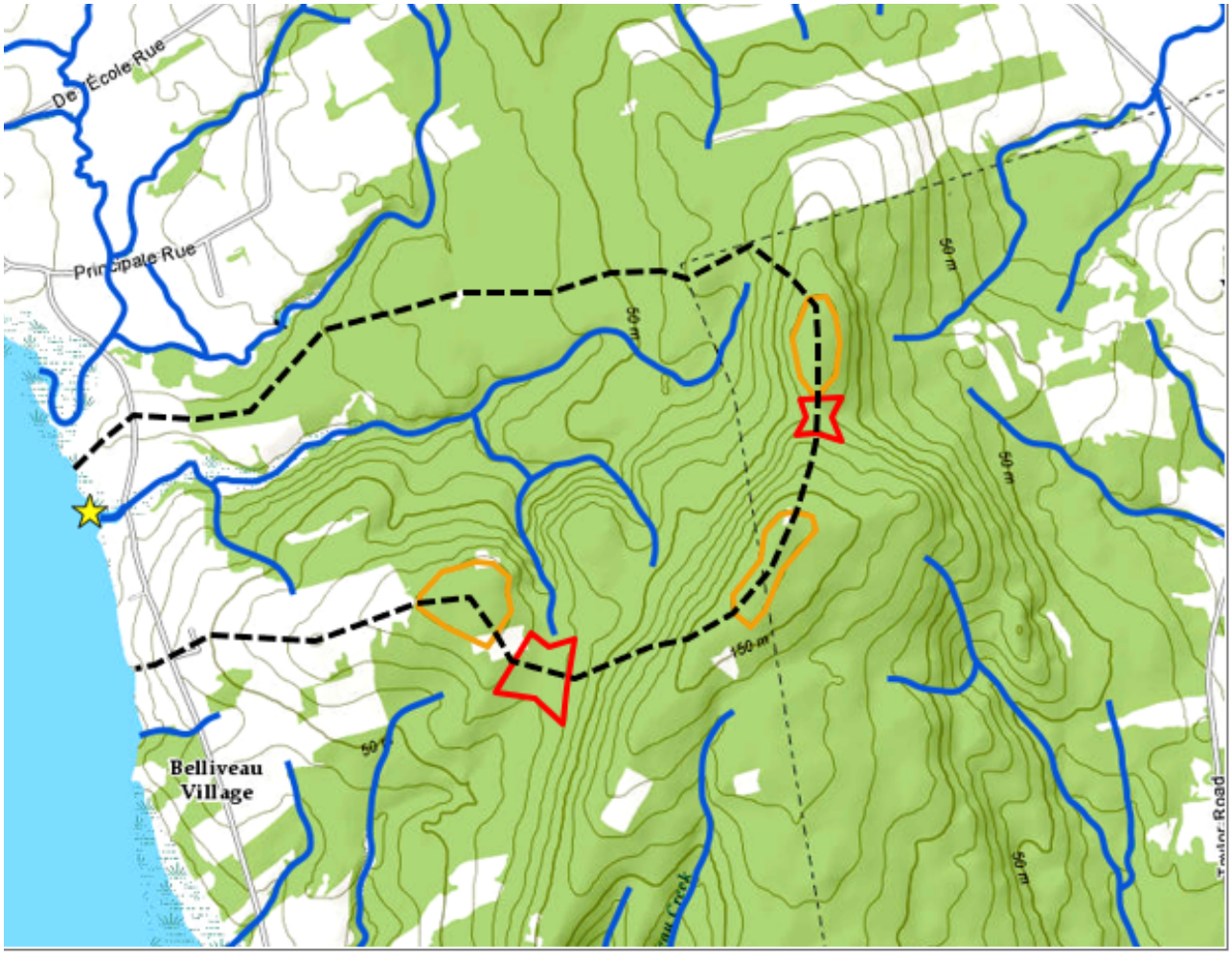
Grade: 6-12

Envirothon NB Learning Objectives

Teacher Guide

Watershed Delineation Activity

The objective is to delineate this small tributary indicated with the star by following the delineation steps. Keep in mind that the stream may not perfectly be surrounded by peaks and saddles; there could be rough terrain between the elevations. In those areas, use your judgment on where the water may flow.



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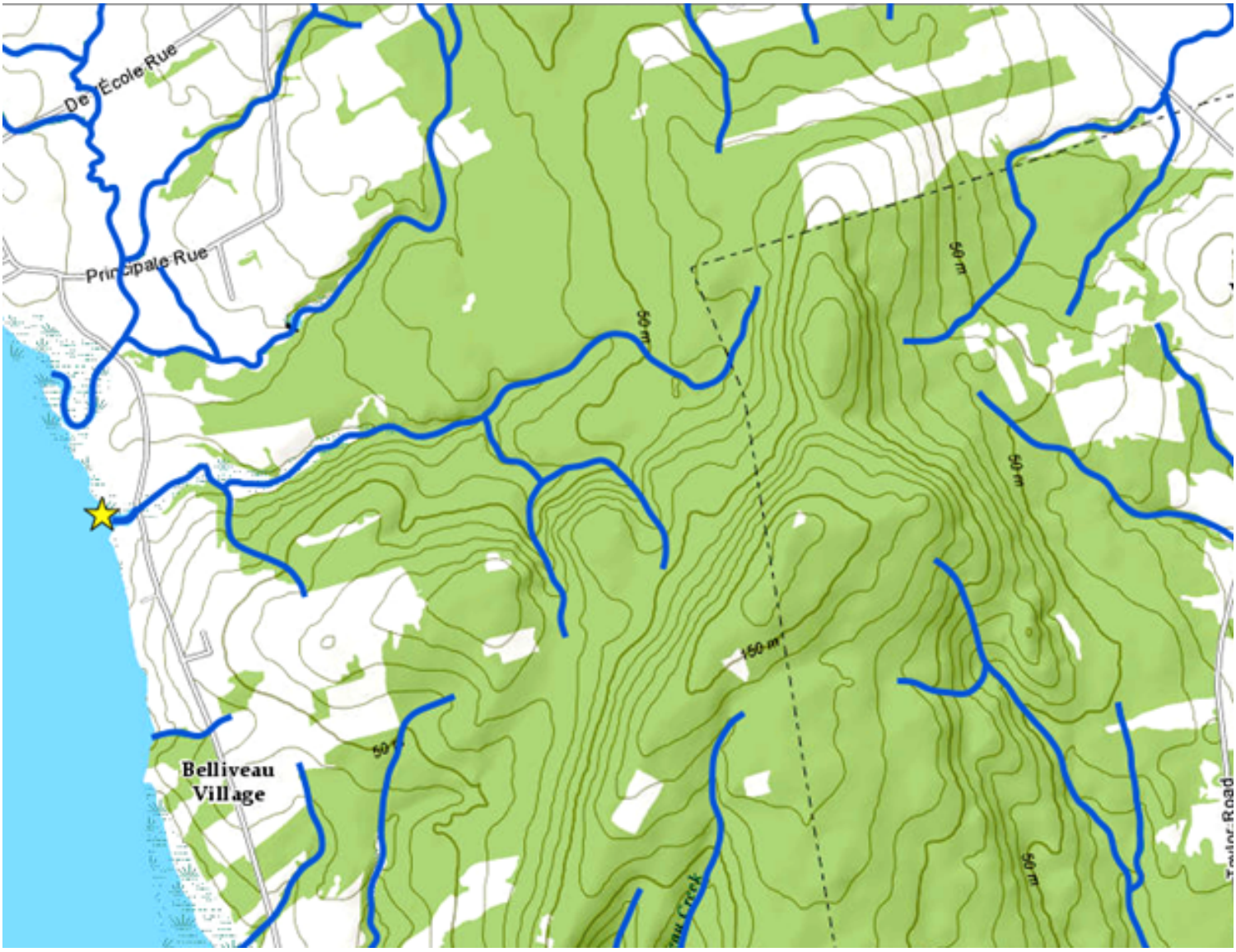
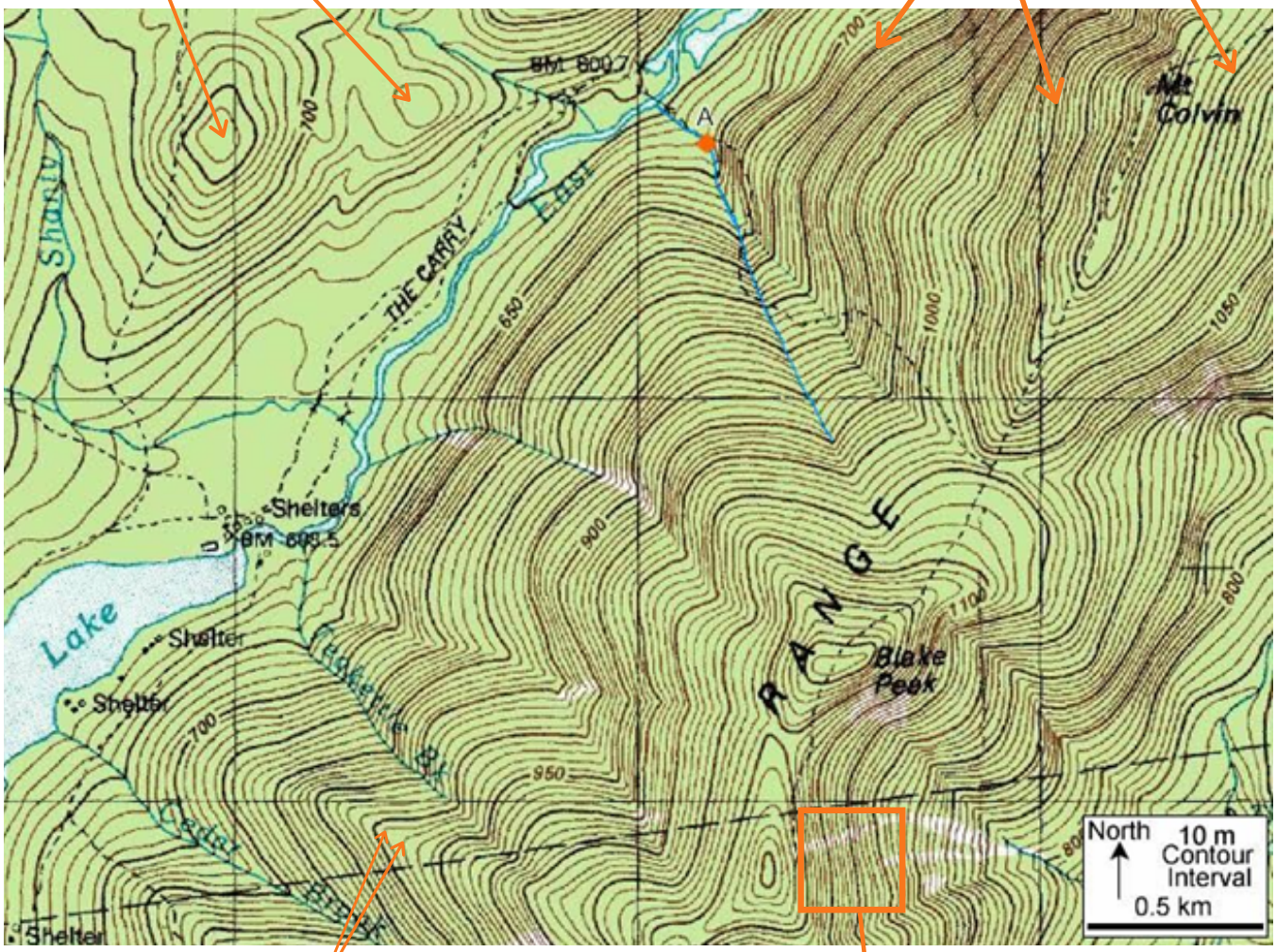


How to Delineate a Watershed

Step 1: Look at the land topography

Circles on the map depict the ***top*** of the hill

Each line denotes ***land elevation***



Spacing between lines determines the ***slope***

The closer the lines are to each other, the ***steeper*** the slope

Appendix A

Student Worksheet

How to Delineate a Watershed

Step 2: Determine which watershed you want to delineate

Step 3: Look for the highest elevations (orange)

- Find all of the peaks immediately surrounding your watershed.

Step 4: Find the lowest elevation between the peaks, also called "saddles"

- If you're walking down one peak toward another, the saddle is where you start going "back up" again

Note

- There is always a saddle between each peak!
- Notice that some peaks surrounding the watershed may not fall into the delineation pattern.

Step 5: Connect the peaks and saddles

- Starting at the mouth of the river, follow each line perpendicularly

Note

- Use ridges as guides.
- Be sure to NOT cross a river
- Make sure to include ALL branches in your watershed, NONE from other watersheds!

We've just delineated the Canadian Brook sub-watershed!

Any rain that falls within this boundary will make its way to the mouth of the river.