Michigan Water Stewardship Program

Recreate the Great Lakes Basin Watershed

This activity engages students with the formation and function of the Great Lakes Basin Watershed.

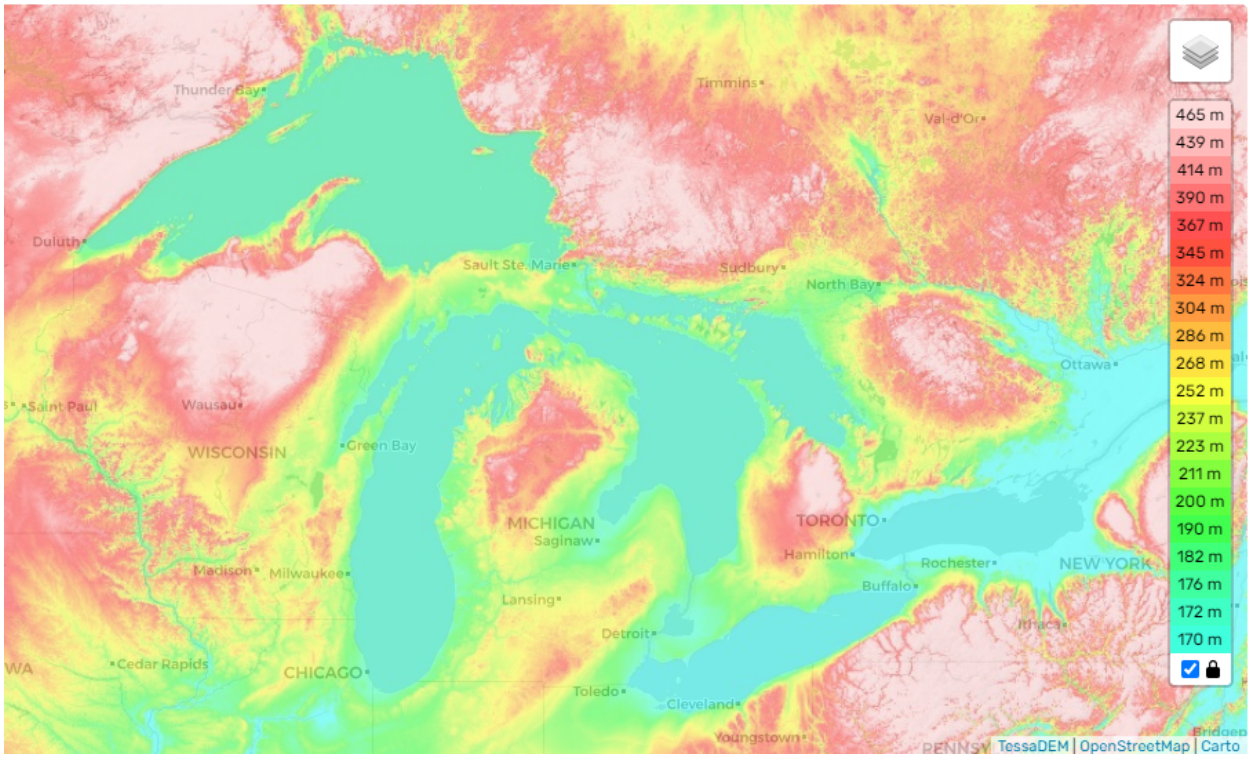
Introduction: This activity is meant for small groups in a lab setting led by an instructor. This may work best with different 'stations' one being the ARS the other stations having other relevant activities to supplement the lesson.

Objectives: Students will use the ARS to understand the Great Lakes Basin as a watershed..

Two Important Rules for Using the Sandbox:
Keep the sand in the box
Please don't touch the computer or projector to insure proper settings

Activity:

Using a topographical map for reference, recreate your regional watershed, the Great Lakes Basin using the ARS.



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Potential Opportunities:

What is a watershed? What is a sub-watershed? * More advanced concept - What is an HUC? (https://www.usgs.gov/media/images/watershed-boundary-dataset-structure-visualization)

What are the major watersheds in the United States? (Share Map)

How was your watershed, the Great Lakes Basin formed?

How does water flow from your point within the Great Lakes Basin?

How does water flow from any given point within the Great Lakes Basin?

How has human activity impacted water flows within your watershed? (Hints: farmland often has tiles which direct water off land that it would have infiltrated or soaked into. Urban areas have many impervious surfaces like roofs and roads which direct water off land that water would have otherwise infiltrated. New subdivisions in suburban areas are often created on wetlands so the soil is built up and the water directed to retention ponds nearby.)