Buffalo's Trees: NYSSLS Alignment

Teacher guide for the one-page student worksheet at mrsajdak.com/maps/buffalo-trees. Environmental Science, grades 9 to 12. The worksheet is low-write: tick boxes, short blanks and one or two written lines. The answer key is kept off the website; write to rsajdak@buffaloschools.org for it. © 2026 Ryan Sajdak. Free to use, share and change under CC BY-NC-SA 4.0 (creativecommons.org/licenses/by-nc-sa/4.0): give credit, do not sell it, share your version the same way.

What it is

A map of every square meter of Buffalo, New York that is under tree canopy: 23.0% of the city. Canopy means alive (from 60 cm aerial infrared) and taller than two meters (from airborne lidar). The Layers box switches between the canopy, canopy by neighbourhood, the city's street tree list, and the 1938 lending map. The neighbourhood called Central is downtown.

Objectives

Printed on the worksheet, each with a box to tick.

I can	Questions
I can read tree canopy numbers from a map and find a pattern.	1 to 3
I can use evidence from a map to check a claim.	4 and 5

Standards

Core ideas touched: ESS3.C Human impacts on Earth systems, and **LS4.D** Biodiversity and humans. It supports work toward **HS-LS2-7** (reducing the impacts of human activities on the environment and biodiversity) by giving students local evidence about where a city's trees are. It does not assess that expectation by itself.

The science and engineering practices and crosscutting concepts below are named in New York State P-12 Science Learning Standards language, and each one is printed on the worksheet at the part where students use it.

Part by part

Part	Practice (SEP)	Concept (CCC)	What students do
1. Read the map	SEP 4 Analyzing and interpreting data		Read the canopy percent for four neighbourhoods, two named and two chosen.
2. Find a pattern		Patterns	Name the leafiest neighbourhood in their table, then compare a cemetery with downtown on the canopy layer.
3. Check a claim	SEP 7 Engaging in argument from evidence		Test the claim that empty street tree spots mean little shade, using Seneca-Cazenovia as evidence.

Running it

About 15 to 20 minutes. Students must pick "Canopy by neighbourhood" in the Layers box before the cursor shows numbers (the page spells it the Canadian way). The claim in Part 3 is the point of the map: the street tree list explains about 2% of the canopy, because most of a city's trees are in yards, parks and cemeteries. Students outside Buffalo can still do every question.