

## Urban Trees and Climate Adaptation

Duration  
**4:20(cc)**

**STEAM Curriculum Lesson Extension:**  
*Guaran-Treed Oxygen, Grade 6*

Produced by [Metro Vancouver](#)

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### Goal

Students will learn how one city is creating a decision-making framework in order to best identify trees that will be successful in an urban environment undergoing a change in climate.

### Overview

Students will learn how trees that grow in a forest outside of an urban area will have different needs than those grown in a city. They will also see how the additional environmental change in the climate requires rethinking of tree species to be included in an urban setting.

### Connections to EarthX STEAM Curriculum Lesson: *Guaran-Treed Oxygen*

Students learn the importance of trees as they provide ecosystem services. The city of Vancouver is researching planting different types of trees to ensure the changes in their climate will be taken into account.

### Guiding Questions

- What job title would you give a tree planted in an urban area? Why did you give it that name?
- The statement was made (2:00) “Choosing tree species carefully is one of the most important considerations that determine their resilience.” What plant needs must be kept in mind when choosing trees to be used in the city?
- Think of a time when you have had to adapt to a change. Can you tell how it is like the city of Vancouver’s efforts to plant resilient urban forests?

### Vocabulary

- Ecosystem services
- Climate projections
- Typology
- Surface rooting
- Persia
- Urban forest canopy

### Standards

#### Next Generation Science

- 5-LS1-1
- 5-ESS3-1
- MS-LS2-4

#### TEKS Science Objectives

- 5.b.10
- 6.b.12
- 7.b.10A
- 7.b.10B