

THE POWER OF TREES

Trees are essential for the maintenance of life on Earth, and each day they work hard to help mitigate our impacts on the environment.

Key Environmental Benefits

WATER FILTRATION - Trees absorb and filter rainwater, preventing stormwater runoff from rushing into our waterways. As a river city, we rely on trees to carry out the important role of helping to reduce flooding and ensuring pollutants are filtered out before they reach our delicate ecosystems.

IMPROVE AIR QUALITY - Trees work hard every day to absorb carbon dioxide and pollutant gases through their leaves and bark, while emitting oxygen. This improves air quality and reduces the concentration of greenhouse gases in our atmosphere.

URBAN COOLING - As our urban hardscapes continue to grow, heat islands are formed. Sun rays are absorbed and re-emitted from buildings and pavement, which causes urban temperatures to increase by as much as 23°C compared to surrounding green spaces. Trees can help reduce the urban heat island effect by providing shade and releasing moisture into the atmosphere.

Suggested Learning Opportunities

The role of urban planning in fighting climate change

- Video: <https://www.youtube.com/watch?v=piSlo1mhVUQ&feature=youtu.be>
- Activity: Plan a sustainable community! Consider the ways in which natural elements, infrastructure, and human activities interact to induce positive (or negative) effects on our environment.

Ottawa's Urban Forest Management Plan

- Website: <https://ottawa.ca/en/living-ottawa/environment-conservation-and-climate/trees-and-urban-forests/ottawas-urban-forest-management-plan>
- Activity: Conduct a tree audit of your school community to count and measure the impact of local trees.

Your watershed

- Website: <https://www.ottawariverkeeper.ca/watershed-fact/>
- Activity: We all live in a watershed! Learn about where your school's rainwater flows and the impact of stormwater runoff on local aquatic ecosystems.