



Lesson Plan: Historic Landfills and Perpetual Care, Grade 11 Regional Geography (CGD3M)

Introduction

Historic Landfills were typically located near wetlands, streams, abandoned gravel/sand pits, and rural areas far removed from developed communities. However, the space between historic landfill sites and the community have often decreased over time as new developments encroach on landfill boundaries. In this lesson, students will explore landfill management through various stakeholder (a person or group with an interest or concern related the landfill) perspectives and identify how these perspectives might impact decision making.

Learning Objectives

1. Compare the perspectives of different groups in relation to a historic landfill
2. Analyze how landfill management affect the sustainability of human and natural systems in the region
3. Assess the impacts, both positive and negative, of waste management practices from various stakeholder perspectives
4. Describe programs in the region that are intended to foster stewardship/sustainability with respect to waste management

Resources Provided (located in the resource folder)

- Region Owned Landfills Map
- Oshawa Landfill Site Map

Questions

Historic landfills were typically located near wetlands, streams, abandoned gravel/sand pits, and rural areas far removed from developed communities.

1. How were these areas seen in the past verses today?
2. How has siting of waste management facilities changed over the years?
3. Brainstorm areas of consideration when siting a waste management site (Examples include odour, noise, aesthetics, air emissions, groundwater and surface water, natural environment, population, transportation, local land use in the area, cost, etc.)
4. Identify at least 3 waste management programs can be implemented by the Region to divert waste away from the black bag garbage? (Program examples include reuse, green bin organics, blue box recycling, leaf and yard waste, household hazardous waste, electronic waste, battery collection, etc.).

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5. Identify at least 3 environmental/human health benefits for each of the identified programs in question 3 above.
6. What other sites or types of activities would have similar concerns?

Activity

1. Provide students with a map of the Oshawa Landfill site.
2. As a class, brainstorm a list of potential Oshawa Landfill stakeholders. A stakeholder is an individual or group that may have an interest in any decision or activity about the Oshawa Landfill site. (Stakeholder examples at this site include school, daycare, Central Lake Ontario Conservation Authority, Scouts Canada, adjacent residents, Durham Region staff, Ministry of the Environment, Conservation and Parks, City of Oshawa)
3. Break the class into equal groups representing at least four of the stakeholder groups identified above.
4. Each stakeholder group will work together to identify what activities or decisions they might be interested in, what their concerns might be, and how the Region might best communicate with each stakeholder group.
5. Once completed, each group will present their materials to the class.
6. Once the presentations are complete, compare the perspectives of the different groups and discuss how these perspectives might impact decisions are made.

Summary

Waste does not just disappear once it leaves your house. It needs to be managed responsibly to protect the environment and human health. How we choose to manage waste today impacts the future.

Expanded Curriculum Connections

The Ontario Curriculum, Grade 11 and 12: Canadian and World Studies, 2015 (revised)

Grade 11 Regional Geography (CGD3M)

A. Geographic Inquiry and Skill Development

- A1. Geographic Inquiry: use the geographic inquiry process and the concepts of geographic thinking when investigating geographic issues in a selected region
- A2. Developing Transferable Skills: apply in everyday contexts skills, including spatial skills, developed through geographical investigation, and identify some careers in which a background in geography might be an asset

B. Natural and Human Systems

- B2. Patterns of Natural and Human Systems: describe patterns in natural features and population distribution in the selected region, and analyse the relationship between them
- B3. Quality of Life: assess quality of life in the selected region, including factors that contribute to quality of life and policies/programs that aim to improve it

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C. Sustainability and Stewardship

- C1. Sustainability and Stewardship of Natural Resources: analyse issues associated with sustainability and stewardship of natural resources in the selected region
- C3. Development Projects/Megaprojects: analyse various issues associated with development projects, including, where applicable, megaprojects, in the selected region