Industrial Releases of Toxic Substances in Canada

Group 33 Project Pitch Presentation

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Topic and Social Good

1. Pollutants pose serious risks to human health

• Mercury can cause neurological damage, particularly in children.

2. Negative impact on wildlife

- Pollutants accumulate in fish and other organisms.
- Ecosystems are disrupted by pollutant build-up.

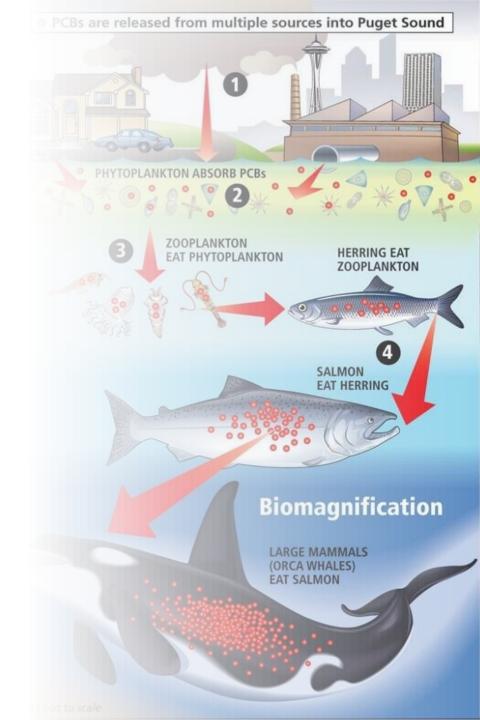
3. Preventing pollutant release protects

- Public health.
- Community well-being.









Topic and Social Good

1. Research goal

- Provide data-driven insights for social change.
- · Identify high-risk areas.
- Evaluate pollution trends.

2. Objectives

- Promote stronger environmental regulations.
- Inspire sustainable practices across Canada.

3. Aim

 Benefit all Canadians through improved public health and environmental quality.



Intended Audience & Key Questions

1. Target audience

Policymakers and environmental scientists in government

2. Purpose

Provide visualizations to make informed pollution control decisions

3. Key questions addressed

- Which regions in Canada have the highest levels of toxic water contamination?
- How has industrial pollution changed over time, especially in response to regulations?
- Which sectors are the largest contributors to water pollution?



Data Sources

1. Primary datasets

- National Pollutant Release Inventory (NPRI)
- Canadian Environmental Sustainability Indicators (CESI)
 - Track pollutant releases across industries and geographic regions.

2. Urban insights dataset

ChemTrac data from Toronto Open Data.







Data Sources

1. Additional data source

- Bio-monitoring data.
- Assesses human exposure to pollutants.
- Links emissions to health risks in affected communities.

2. Multi-dimensional data approach:

• Provides a comprehensive view of industrial pollution across Canada.

Thank you for your attention We look forward to your feedback!