

# Making the Links: Pollution, Poverty, and Environmental Justice

November 23, 2010

Cornwall, Ontario

CANADIAN ENVIRONMENTAL LAW ASSOCIATION

Renee Griffin, Project Counsel

# Introduction

- Notion of Environmental Justice
- Environmental Justice in Canada
  - Examination of Pollution and Poverty in the Great Lakes Basin
- Example of Interdisciplinary approach to dealing with environmental inequities: Making the Links Project



# Notion of Environmental Justice

- The environmental justice movement grew out of the notion of ‘environmental racism’ in the United States
- What is ‘environmental racism’?
  - United Church of Christ’s Commission for Racial Justice: the intentional siting of hazardous waste sites, landfills, incinerators and polluting industries in areas inhabited mainly by Blacks, Latinos, Indigenous peoples, Asians, migrant farm workers and low-income peoples.”
  - Bullard (1996): any policy, practice or directive that differentially affects or disadvantages (whether intended or unintended) individuals, groups, or communities based on race or colour
- Researchers in the U.S. have shown that non-white communities are faced with a disproportionate burden of environmental problems, have less say in the design and implementation of environmental regulations, and are less likely to have their contributions regarding the alleviation of environmental degradation considered
- In Canada, racism hasn’t been as strong a focus in consideration of environmental problems



# Notion of Environmental Justice con't

- What is 'environmental justice'?
  - Environmental justice links many social movements (anti-racism movements, Aboriginal rights and sovereignty movements, labour union movements, and environmental movement) and embodies a broad conception of the 'environment'
  - Hallmarks of environmental justice include access to information, early and meaningful public participation in environmental decision making, and access to courts and tribunals
  - It is a broader goal that incorporates the more narrowly defined problem of environmental racism



# Environmental Inequities in Canada

- Environmental justice efforts in Canada have been somewhat piecemeal
- Canadian cities do not tend to have racial residential segregation in the same way as American cities
- Colonialism, urbanization and the expansion of the natural resource economy have contributed to the disadvantage of specific populations
- There are low-income areas in Canadian cities comprised of one or more racial groups.
  - Low-income areas are vulnerable in contrast to more affluent areas where residents are able to participate in decision-making and mobilize to protect their own interests



# Environmental Inequities in Canada

- As a result of resource development, small towns across Ontario are left with environmental health legacies
- Aboriginal communities were often pushed to “undesirable” land as a result of colonialization. Now these communities are left with a myriad of toxic legacies.
- Urban planning has developed to benefit middle to upper classes, allowing some areas of cities to deteriorate. Often , these areas are home to low income and immigrant families.
- Lack of recognition of the special needs of biological vulnerable populations contributes to environmental injustice.

# Examination of Pollution and Poverty in the Great Lakes Basin

- November 2008 study examining pollution and poverty in the Great Lakes basin completed by Pollution Watch partners (CELA and Environmental Defence)
- More than 1 billion kilograms, or about 25% of total air pollutants reported in Canada, were reported being released to the air in 2005 in the Great Lakes basin.
- The reported releases of air pollutants from industrial facilities vary widely across the Great Lakes basin.
- There are 37 areas in the Great Lakes basin, that have both high reported air releases of toxic pollutants and high poverty rates. People living in these areas may have a double challenge: high potential for exposure to pollutants, and the physical and social vulnerabilities that come with poverty



# Examination of Pollution and Poverty in the Great Lakes Basin con't

Table 1: Top 10 census subdivisions with the highest amounts of air releases of toxic pollutants in 2005 (kg) and the incidence of low income in economic families in 2001

Rank in Great Lakes basin	Name of Census Subdivision (CSD)	Province	Poverty Rate % in 2001	Number of NPRI Facilities that Report Toxics	Air Releases of Toxic Pollutants (kg) in 2005*
1	Greater Sudbury	Ontario	11.5	10	4,573,623
2	Haldimand	Ontario	6.3	7	3,010,746
3	St. Clair	Ontario	5.8	12	2,990,673
4	Sarnia	Ontario	11.3	8	2,837,269
5	Toronto	Ontario	19.4	150	2,819,466
6	Hamilton	Ontario	16.1	39	2,240,453
7	Mississauga	Ontario	11.3	71	1,653,908
8	Oshawa	Ontario	11.1	6	1,611,357
9	Thunder Bay	Ontario	11.1	11	1,216,208
10	Windsor	Ontario	13.2	30	1,007,380
	<b>Total - top 10 CSDs</b>			<b>344</b>	<b>23,961,083</b>
	<b>Total all CSDs</b>			<b>1,398</b>	<b>51,301,570</b>
	<b>Top 10 as % of total</b>			<b>24.6%</b>	<b>46.7%</b>

\* CSDs with air releases of toxic pollutants above 1 million kg

# Examination of Pollution and Poverty in the Great Lakes Basin con't

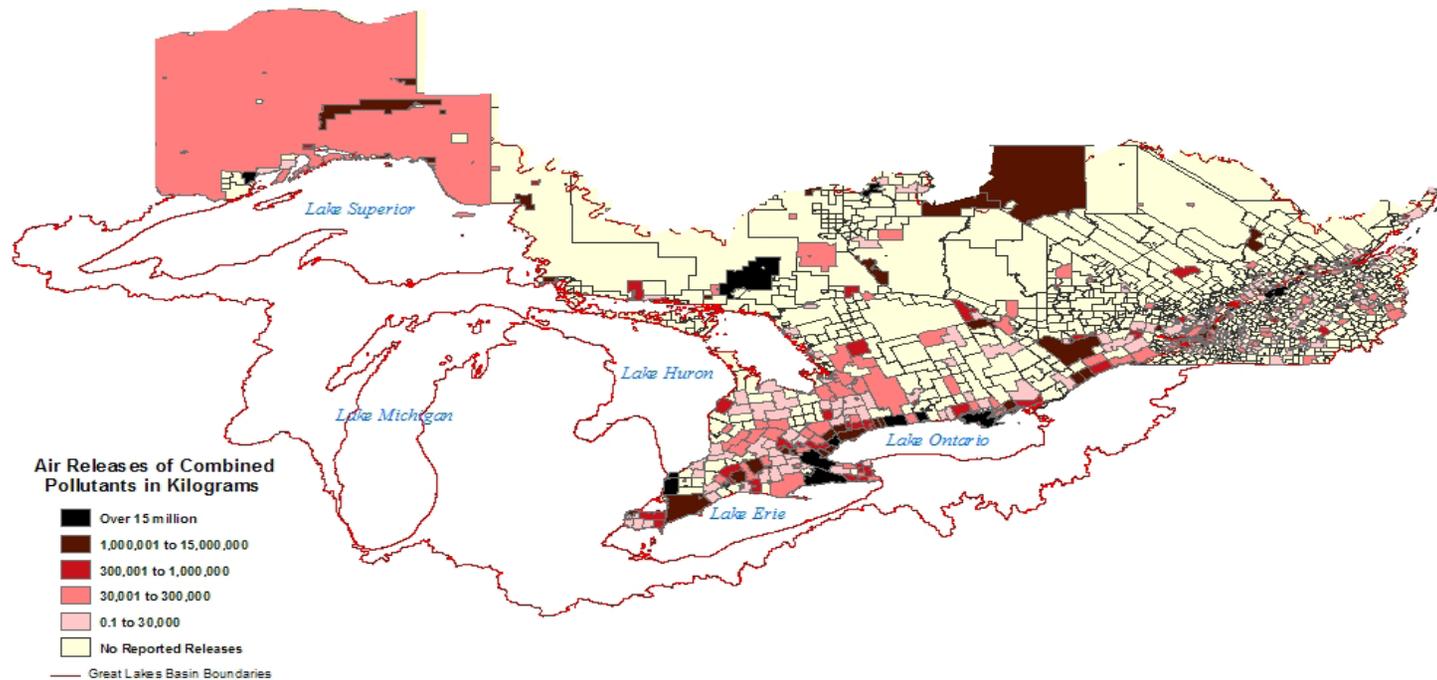
Table 2: Census Subdivisions in the Great Lakes Basin with Poverty Rates at or above the National Average of 11.8% in 2001 and Air Releases of Combined Pollutants above 1 million kilograms from NPRI Facilities in 2005

Census Subdivision Name (CSDs)	Census Subdivision ID#*	Air releases of Toxic Pollutants in 2005 (kg)	Air releases of Criteria Air Contaminants (CACs) in 2005 (kg)	Air releases of Combined (toxics and CACs) in 2005 (kg)	Incidence of Poverty in 2001 (%)
Hamilton	3525005	2,240,453	58,459,377	58,788,549	16.1
Bécancour	2438010	692,500	45,579,386	45,680,098	11.9
Rouyn-Noranda	2486033	101,871	27,212,078	27,313,949	12.3
Sorel-Tracy	2453052	30,500	25,695,946	25,716,304	14.1
Shawinigan	2436028	272,412	19,722,812	19,791,035	22.5
Montréal-Est	2466005	587,935	16,248,975	14,962,514	20.2
Sault Ste. Marie	3557061	364,495	14,439,101	13,845,095	13.5
Melocheville	2470060	107,697	9,461,000	9,542,697	15.0
Montréal	2466025	494,499	11,059,518	9,451,843	26.5
Saint-Romuald	2425025	168,128	8,573,863	7,981,183	14.5
Toronto	3520005	2,819,466	13,205,592	7,134,465	19.4
Windsor	3537039	1,007,380	8,412,711	7,023,209	13.2
Salaberry-de-Valleyfield	2470045	106,728	8,036,315	6,514,506	18.4
Trois-Rivières	2437065	371,805	6,456,454	5,999,475	18.2
Joliette	2461025	29,113	5,757,456	5,703,089	19.2
Saint-Basile	2434038	299	5,340,980	5,320,299	13.2
Thurso	2480050	302,894	4,774,851	4,656,071	22.6
Espanola	3552026	311,826	4,510,685	4,505,528	15.6
Cornwall	3501012	642,468	3,512,262	3,334,161	19.0
Owen Sound	3542059	14,899	2,555,849	2,520,754	13.9
Grand-Mère	2436055	127,025	2,708,417	2,463,901	17.8
Québec	2423025	186,085	2,521,992	2,310,802	22.1
Hull	2481020		2,200,378	2,184,401	18.0
Senneterre	2489040	24,030	1,683,788	1,636,618	21.7
Kirkland Lake	3554068	408	1,600,444	1,567,698	17.0
London	3539036	287,180	1,864,821	1,168,920	12.7
Lachute	2476020	39,693	1,016,983	1,039,762	19.3

# Examination of Pollution and Poverty in the Great Lakes Basin con't

## POLLUTION MAP

Air Releases\* of Combined Pollutants in Census Subdivisions in the Great Lakes Basin

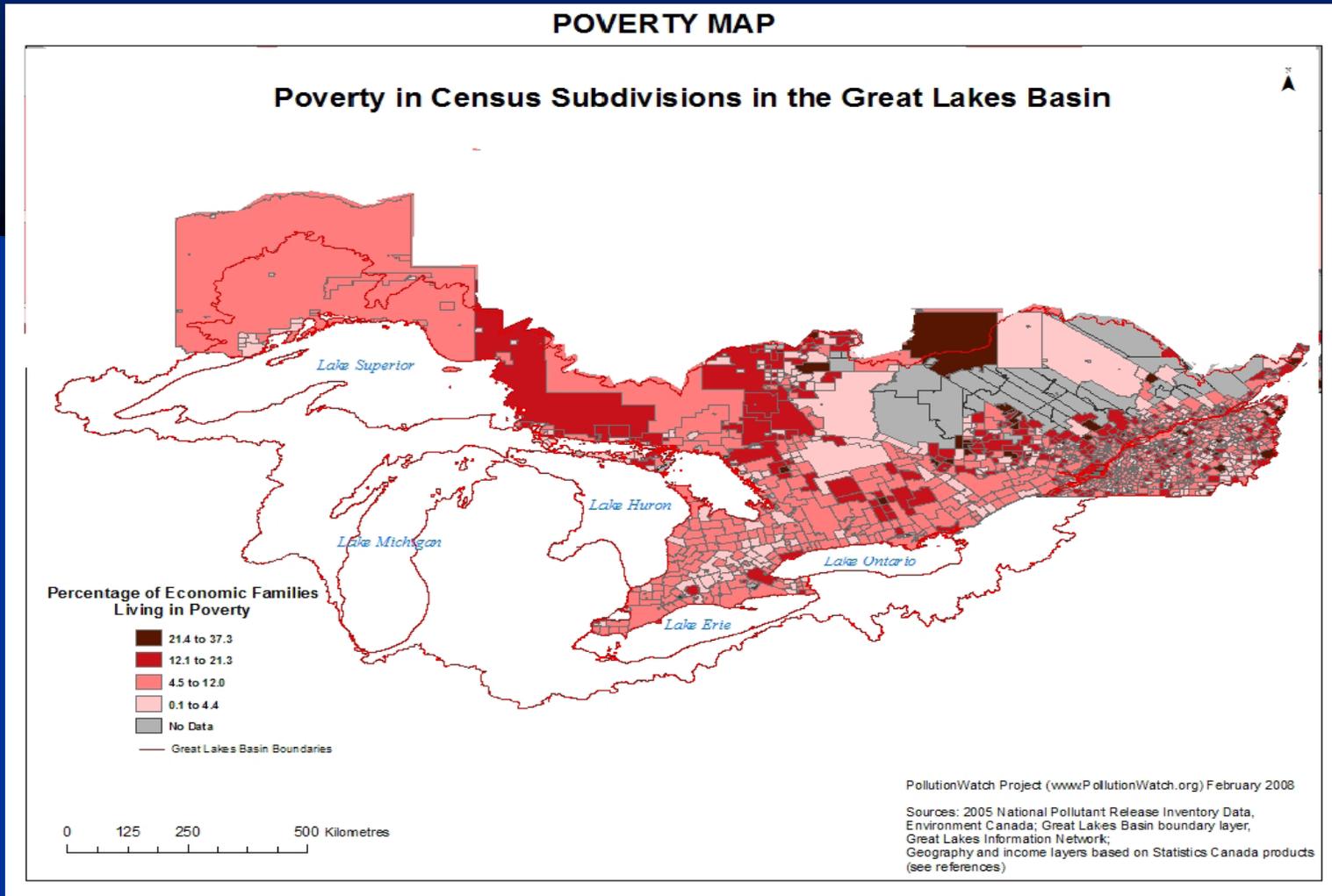


PollutionWatch Project ([www.PollutionWatch.org](http://www.PollutionWatch.org)) February 2008

Sources: 2005 National Pollutant Release Inventory Data, Environment Canada; Great Lakes Basin boundary layer, Great Lakes Information Network; Geography layer based on Statistics Canada products (see references)

\* From industrial sources reporting combined (toxics and criteria air contaminants) air pollutants to the National Pollutant Release Inventory

# Examination of Pollution and Poverty in the Great Lakes Basin con't



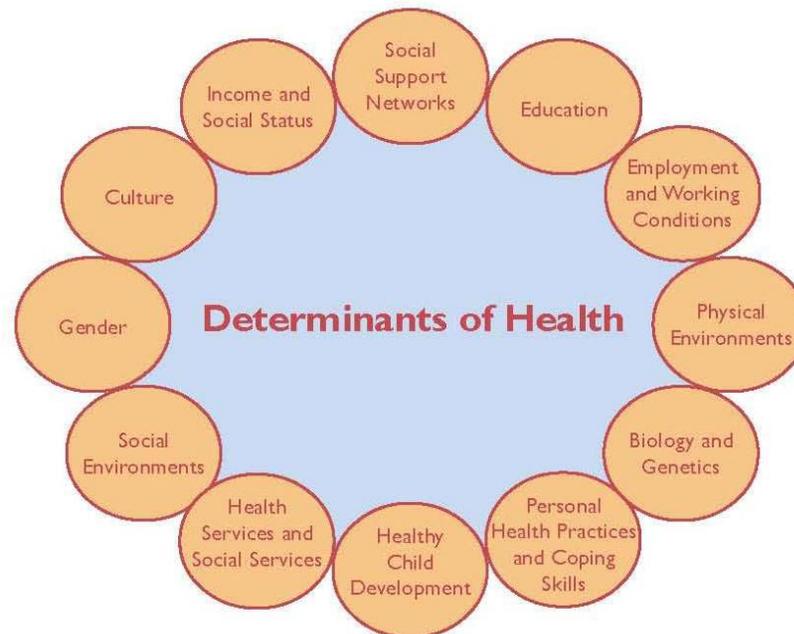
# Environmental Inequities in Canada

- Another example of a recent study was done in 5 Canadian cities and found a statistically significant relationship between toxic carcinogenic industrial pollution exposure and factors including median household income, percent immigrants, and percent visible minorities (Baxter)
- Another found Montreal neighbourhoods characterized by “social and material deprivation” had higher levels of ambient air pollution (Crouse, Ross, Goldberg)
- Situation in Ontario: certain communities in Ontario have an unfair toxic air pollution burden

# Environmental Equity: Why It Matters

- World Health Organization: A number of factors affect human health, incl. both economic status and physical environment
- Poverty is a cross-cutting determinant

**Figure 1: Determinants of Health**



Source: World Health Organization, undated.

# Environmental Equity: Why It Matters

- Poverty is a major determinant of health
- High potential for exposure to pollutants
- >1M children in Canada live in poverty
- Environmental burden contributes to higher rates of major chronic diseases among people living in poverty
- Diet and the built environment also contribute to exposures



# Environmental Equity: Why It Matters

- Socio-economic status influences the conditions of childhood, and the availability and quality of education, food, housing, employment, working conditions, and health and social services
- Poverty (esp. malnutrition) can contribute to greater susceptibility to harmful effects of exposures



# Environmental Equity: Why It Matters



- Some statutes include consideration of the impacts of exposures on certain sensitive populations
- Health-based air pollution standards
- Increasing collaboration between poverty reduction groups and environmental orgs
- Initiatives such as “Environmental Health, Equity, and Law: Making the Links” Project
- Ecojustice Application for Review re pollution “hot spots”
- Suggestion that section 7 Charter rights are triggered

# Environmental Law Implications: Looking Forward

- Work toward environmental justice/equity considerations being incorporated into government decision-making (approvals, siting, environmental assessment)
- Need consideration of cumulative environmental effects
- Health-based standards for contaminants with known adverse environmental health effects
- Continue and combine efforts at poverty reduction and environmental protection



Thank you

**Renee Griffin**  
[rgriffin@cela.ca](mailto:rgriffin@cela.ca)