

**Embracing Reciprocity: Revisiting Domestic Legal Solutions To
Ontario's Transboundary Pollution Problem**

by

Shi-Ling Hsu

Associate Professor
University of British Columbia Faculty of Law

&

Austen L. Parrish

Associate Professor
Southwestern Law School

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EMBRACING RECIPROCITY: REVISITING DOMESTIC LEGAL SOLUTIONS TO
ONTARIO'S TRANSBOUNDARY POLLUTION PROBLEM

Shi-Ling Hsu¹ & Austen L. Parrish²

Abstract:

For decades, the Canada-United States relationship has been special. Both countries have long been proud of their undefended border and the degree of integration, trade, and cooperation that exists between them. But times have changed. The era of unparalleled cooperation and bilateralism may be entering a downward cycle. In recent years, a number of intractable transboundary disputes – in which the countries have failed to use traditional bilateral dispute mechanisms – have increased border tensions. Notably, instead of turning to diplomacy, bilateral institutions, or public international law, the U.S. has adopted a more unilateral approach. Individual Americans, finding no relief or interest from its government in solving transboundary environmental challenges, have turned to the U.S. courts to sue Canadians through the extraterritorial application of U.S. law.

This changed state of North American cooperation poses a unique challenge for Canada, particularly in the context of transboundary air pollution that is causing significant human health and environmental harms in Ontario. This article argues that in light of the new American unilateralism, Canada should explore reciprocity: the use of its own domestic laws to remedy transboundary environmental harms found in Ontario. The Article does so by exploring how

¹ Associate Professor of Law, University of British Columbia Faculty of Law. The author is grateful to Donald McCubbin for his help and comments, and the research assistance of Jeffrey Yuen, Ryan Lee, and Joe Broadhurst.

² Associate Professor of Law, Southwestern Law School. The author is the Director of Southwestern's Summer Law Program in Vancouver, B.C., Canada, where he teaches international and comparative law at the University of British Columbia. The author is grateful to Natasha Hill for her research assistance.

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*Ontario could use its courts to hold U.S. polluters liable for transboundary air pollution. The Article explains why the traditional barriers to bringing a domestic lawsuit are no longer insurmountable, and explains the lessons taught by the recent landmark decision *British Columbia v. Imperial Tobacco*. Although lamenting what appears to be a deterioration in cooperation in U.S.-Canada relations, the Article concludes that in the changed North American political environment, Canada should embrace, not ignore, reciprocity.*

INTRODUCTION

For decades, the Canadian-United States relationship has been special, if not unique. Internationally, the legal bond between the two countries is hailed as a model for cooperation. Hundreds of treaties and agreements exist between the two countries covering a wide range of issues, from the environment to trade to military cooperation.³ Numerous bilateral institutions also exist, such as the International Joint Commission, the International Pacific Halibut Commission, and the North American Aerospace Defence Command, more commonly known as NORAD. The trading relationship, the largest in the world, has been bolstered by the North American Free Trade Agreement, or NAFTA. As one policy paper recently described it: “Both neighbours have long bragged about their lengthy ‘undefended border’ and the degree of integration, trade, and partnership that exists between them. Internationally, this partnership has been admired; it has neither precedent, nor equal in the international system today.”⁴ Indeed, in the early 1990s, the signing of NAFTA was seen as a high-water mark and the culmination of decades of extensive integration and cooperation.

But the unparalleled cooperation between the two countries may be entering a downward cycle. In recent years, a number of intractable transboundary disputes – in which the countries have failed to use traditional transboundary dispute mechanisms – have increased border tensions.⁵ Notably, in these disputes and others, once-heralded transboundary institutions were rendered powerless. Treaties like the time-tested 1909 Boundary Waters Treaty and the International Joint

³ Excluding multilateral ones, Canada is party to over 680 treaties with the United States. Treaty Section, Department of Foreign Affairs and International Trade, Government of Canada, Canada Treaty Information, online at http://www.treatyaccord.gc.ca/contact_us.asp?Language=0&Page=C (last modified August 24, 2006, last visited August 24, 2006).

⁴ KARI ROBERTS, A CONTINENTAL DIVIDE? RETHINKING THE CANADA-U.S. BORDER RELATIONSHIP 3 (Canada West Foundation 2006) (on file with author).

⁵ See *infra* section I.B.

Commission were bypassed. NAFTA panel decisions were ignored.⁶ Instead of diplomacy, or embracing bilateral institutions and public international law, Americans have adopted a unilateral approach. Individual Americans, finding no relief and little interest from its government in environmental issues, increasingly believe that suing Canadian companies in U.S. courts through the extraterritorial application of U.S. domestic laws may be the best recourse for remedying transboundary harm.

This changed state of North American cooperation poses a unique challenge for Canada. For Americans, the reluctance to embrace traditional mechanisms for resolving Canadian-U.S. disputes is not altogether surprising. In many ways, it is only the latest manifestation of American exceptionalism,⁷ and the rising power of nonstate actors in global governance.⁸ Whatever the cause, Americans seemed to have resigned themselves to accepting that international engagement and diplomacy will take a back seat to certain American interests.⁹ For Canadians, however, this unilateral approach – particularly when concerning the country’s closest ally – is unfamiliar. Canadians have long prided themselves on their willingness to cooperate in international relations and uphold the norms of international law. Canadians are committed to global engagement, and Canadian policy often stems from this commitment.

⁶ In fairness to the U.S., seeking parallel redress in WTO and NAFTA panels is not usual. Raj Bhala & David A. Gantz, *WTO Case Review 2004*, 22 ARIZ. J. INT’L & COMP. L. 99, 198 (2005). But the total U.S. rejection of NAFTA panel decisions in a trade dispute with Canada was striking, as was the ineffectiveness of NAFTA in playing any kind of dispute resolution role.

⁷ See generally Harold Hongju Koh, *Foreward: On American Exceptionalism*, 55 STAN. L. REV. 1479 (2003)

⁸ See generally Peter J. Spiro, *Nonstate Actors in Global Politics*, 92 Am. J. Int’l L. 808 (1998) (reviewing literature describing the recent rise of nonstate actors in international law); see also Kal Raustiala, *Refining the Limits of International Law*, 34 GA. J. INT’L & COMP. L. 423 (2005); ANNE-MARIE SLAUGHTER, A NEW WORLD ORDER 108-27 (2004).

⁹ See, e.g., David D. Caron, *Between Empire & Community: The United States and Multilateralism 2001-2003: A Mid-Term Assessment*, 21 BERKELEY J. INT’L L. 395 (2003) (explaining that “the United States has changed its attitude and practice toward multilateralism dramatically” in recent years); see also Jutta Brunnée, *The U.S. and International Law: Living with an Elephant*, 15 EUR. J. INT’L L. 617 (2004).

Whether supporting peace efforts,¹⁰ or embarking on quiet diplomacy, Canada traditionally prefers the bilateral to the unilateral. Nowhere has this been more true than when dealing with its southern neighbor.

It may be time for Canadians to rethink the cooperative nature of their relationship with the U.S., and consider a more unilateral approach.¹¹ This paper argues that in light of the recent border-tensions and the new American unilateralism, Canada should explore reciprocity: the extraterritorial application of its own domestic laws to remedy transboundary environmental harm. The paper explores this argument through the lens of a particular cross-border issue – the transboundary air pollution that Ontario suffers originating from U.S. stationary pollution sources. In the past, both countries developed regulatory programs to reduce sulfur dioxide and nitrogen oxide emissions, which have led to the formation of acid rain that has devastated many aquatic ecosystems in Eastern Canada and the Northeastern United States. But times have changed, and the focus of pollution has moved on to other problems. Attention has been focused lately on the cross-border transport of ozone precursors and particulate matter pollution, which are causing, among other harms, a substantial number of illnesses and premature deaths in

¹⁰ Canadian armed forces have taken part in virtually every major world conflict since its confederation in 1867, playing disproportionately large, important, and costly (from a Canadian perspective) roles in World Wars I and II. Canada's only Nobel Peace Prize winner, former Prime Minister Lester B. Pearson, earned his international renown for helping to resolve the 1956 Suez crisis by introducing the idea of a United Nations Peacekeeping force, a quintessentially Canadian solution of cooperative mediation in military conflicts. Approximately 60,000 of the 620,000 Canadians that fought in World War I died, with 172,000 wounded, serving under the direction of British military leadership. Will Ferguson, *Canadian History for Dummies* 289 (Wiley, 2000). By comparison, 116,708 Americans were killed and 204,002 wounded in World War I, a much smaller percentage of the U.S. population. The American War Library, Number of Americans Killed/Wounded, by Action, url: <http://members.aol.com/usregistry/allwars.htm> (updated August 12, 2006, last visited August 23, 2006). In world War II, Canada amassed one of the largest allied forces without conscription, including the fourth-largest air force, consisting of over 730,000 men and women, 17,000 of which died in combat. Desmond Morton, *A Short History of Canada* 240-42 (McClelland & Stewart, Toronto, 2000).

¹¹ Interestingly, the newly-elected leader of Canada's Green Party called for a renegotiation of NAFTA, saying that "it works for the U.S., but not for Canada." CBC.ca, August 27, 2006, <http://www.cbc.ca/story/canada/national/2006/08/26/greens.html> (last visited on August 27, 2006). The surprising thing about this position is that many Canadian environmentalists have been pleased that U.S. duties have curtailed some of the most ecologically destructive and inefficient logging practices in Canada.

Ontario. Much of the pollution can be traced to coal-fired power plants in the Ohio Valley and points south. A recent study by the Ontario Environment Ministry estimated that transboundary air pollution originating in the U.S. annually causes over 2700 premature deaths in Ontario, along with 12,000 hospital admissions, 14,000 emergency room visits, and almost 2.7 million minor illnesses.¹² The economic cost of these health effects is estimated to total over \$3.7 billion Canadian.¹³ In addition, transboundary air pollution causes a variety of other environmental damages, such as loss of visibility, and damage to buildings, outdoor structures, crops, and forests. These environmental damages total another \$1.5 billion. It should surprise no one that Ontario's efforts to persuade the U.S. to reduce emissions have been unsuccessful. This paper proposes legislation and a Canadian lawsuit to solve the ongoing transboundary harm caused by U.S. polluters.

Would such a lawsuit have legs? Some potential defendants think so. In a recent transboundary pollution dispute involving a smelter owned by a Canadian mining company, Teck Cominco (Teck), the U.S. Environmental Protection Agency (EPA) issued Teck an order under the U.S. Superfund law¹⁴ to clean up some downstream pollution caused by Teck's smelter in the town of Trail, British Columbia. The National Mining Association and the Edison Electric Institute lobbied EPA Administrator Michael Leavitt, Secretary of State Colin Powell, and Attorney General John Ashcroft to stop the EPA from enforcing administrative orders against Teck.¹⁵

Member firms of the Edison Electric Institute – electricity generation companies that have coal-

¹² Ontario Ministry of the Environment, *Transboundary Air Pollution in Ontario* 59 (June 2005), available online at http://www.ene.gov.on.ca/envision/techdocs/5158e_index.htm (last visited August 25, 2006).

¹³ *Id.* at I; see also Stewart Elgie, *Federal, State, and Provincial Interplay Regarding Cross-Border Environmental Pollution*, 27 CAN.-U.S. L.J. 205, 215 (2001) (describing the environmental interdependence and stating that “[f]ifty percent of Ontario’s air pollution comes from the U.S., about eighty percent of the pollution of the Great Lakes comes from the U.S...”).

¹⁴ The Comprehensive Environmental Response, Cleanup, and Liability Act, 42 U.S.C. §§9601 et seq.

¹⁵ Parrish, *supra* note __, at 411.

fired power plants that emit the pollutants that flow north and foul Ontario's air – see themselves as standing in Teck's shoes.¹⁶ And a recent case suggests that Canadian courts may be receptive to extraterritorial applications of Canadian laws. In *British Columbia v. Imperial Tobacco*,¹⁷ the province of British Columbia successfully recovered damages from twelve tobacco manufacturers (nine of them non-Canadian) for health care costs associated with tobacco use. What is extraordinary about the *Imperial Tobacco* case is that it not only applied British Columbia law to American defendants that had no presence in Canada, except for tobacco sales, but it involved a newly-enacted provincial statute that reversed the burden of proof with respect to whether a patient's illness actually resulted from tobacco use. British Columbia's willingness to enact, and the Canadian Supreme Court's willingness to uphold, such a significant departure from the usual norms of litigation may signal an erosion of cooperative spirit north of the 49th parallel. The *Imperial Tobacco* case neatly lays a foundation for a unilateral legislative strategy and judicial remedy for a long-standing cross-border environmental dispute, for which American cooperation may not be forthcoming.

This is not to suggest that, as a normative matter, the extraterritorial application of domestic laws to solve U.S.-Canadian cross-border disputes should be viewed positively. As the paper's authors have argued elsewhere, the extraterritorial application of domestic laws is deeply problematic.¹⁸

¹⁶ See, e.g., Letter from Thomas R. Kuhn, President of Edison Electric Institute to Colin L. Powell, U.S. Secretary of State, and Thomas L. Sansonetti, Assistant Attorney General for the Environment and Natural Resources Division (June 2, 2004) (“The unilateral EPA action raises the possibility of Canadian retaliation against our member companies and other U.S. industries whose emissions may cross the international border”); Letter from Jack N. Gerard, President and CEO of National Mining Association to Colin L. Powell, U.S. Secretary of State, John Ashcroft, U.S. Attorney General, and Michael O. Levitt, Administrator, U.S. EPA 2 (Apr. 22, 2004) (questioning the wisdom of pursuing a Canadian company under U.S. environmental laws and addressing the possibility that Canada and Mexico may pursue similar actions under their own respective domestic laws against U.S. companies).

¹⁷ 2005 SCC 49 (Sup. Ct. Canada 2005).

¹⁸ See, e.g., Parrish, *supra* note __, at 402-14; see also Mark P. Gibney, *The Extraterritorial Application of U.S. Laws: The Perversion of Democratic Governance, the Reversal of Institutional Roles, and the Imperative of Establishing Normative Principles*, 19 B.C. INT'L & COMP. L. REV. 297 (1996).

The extraterritorial application of law is undemocratic, and ultimately more likely to increase cross-border tensions than to diffuse them. But in a political environment where the U.S. has retreated from bilateralism, Canadians must consider doing the same. Moreover, Canada's reciprocal use of its own domestic laws may well be the necessary impetus for the U.S. to reconsider its present reluctance to use traditional dispute-resolution institutions, such as NAFTA and the IJC. Paradoxically, Canada's embrace of extraterritorial reciprocity may be the very thing needed to deter the future extraterritorial application of law.

This paper proceeds in three parts. In part I, the paper describes the deterioration of U.S.-Canadian cooperation, and the rejection of bilateral institutions and treaties to solve cross-border disputes. In doing so, the paper canvases several of the most important and recent transboundary cases. Part II describes the problems facing Ontario from U.S. pollution, and Canada's failure to find bilateral or diplomatic solutions to this transboundary problem. In part III, the paper suggests that Canada should embrace reciprocity. It argues that Canada should explore the use of extraterritorial laws to provide Canadian citizens with a remedy for transboundary harm, when traditional dispute mechanisms prove ineffective. The article does so by drawing from the recent *Imperial Tobacco* case and applying it to the case of Ontario's transboundary pollution problem. Although lamenting what appears to be a deterioration in cooperation in U.S.-Canadian relations, the paper concludes that in the changed North American political environment, Canada should embrace, not ignore, reciprocity .

I. BACKGROUND

Given the trade and economic integration between Canada and the U.S., transboundary disputes – particularly those involving environmental concerns – are hardly surprising. Until recently, however, Canada and the U.S. have been particularly effective at resolving these disputes diplomatically or through bilateral dispute resolution processes. But the once unparalleled cooperation between the two nations appears to be on a decline.

A. Still Living With An Elephant

The need for bilateral treaties and institutions to protect and preserve a common environment is almost obvious given the relationship between the U.S. and Canada. The countries share the world's longest border. The extent and diversity of interdependence between the two countries is striking. U.S.-Canada trade in services, cross-border investments, and tourism surpasses \$42 billion yearly.¹⁹ The U.S.-Canadian trading relationship represents the largest flow of income, goods, and services in the history of the world: a staggering \$1.2 billion U.S. dollars daily.²⁰ The U.S. exports more to Canada, than it does to Britain, France, Germany, Japan, and China,

¹⁹ Roger F. Noriega, Assistant Secretary of State for Western Hemisphere Affairs, Remarks to Economic Club of Toronto: Trade & the U.S. Border (March 29, 2004) (describing the trade partnership), at <http://www.state.gov/p/wha/rls/rm/31949.htm>; see also U.S. Dep't of State, Canada-United States Relations (2005), http://www.usembassycanada.gov/content/textonly.asp?section=can_usa&document=canusarelations&subsection1=general (explaining that Canada and the U.S. have the world's largest bilateral trading relationship, and that Canada is the leading export market for 39 of the 50 U.S. States).

²⁰ Government of Canada, Canadian Embassy in Washington, D.C., News Release: Canada Largest Supplier of Oil to U.S., March 28, 2005, online at http://www.dfait-maeci.gc.ca/can-am/washington/trade_and_investment/energyrel050328-en.asp (last visited August 24, 2006) (“Two-way trade between Canada and the United States has more than doubled in value since the signing of the NAFTA in 1994. We are each other's largest trading partner, with US\$1.2 billion in trade now crossing the Canada-US border every single day.”); Wikipedia, The Free Encyclopedia, Canada-United States Free Trade Agreement, http://en.wikipedia.org/wiki/Canada-U.S._Free_Trade_Agreement (modified as of August 11, 2006, last visited August 24, 2006); see also Robert Hage, *The New Reality in Canada/U.S. Relations: Reconciling Security and Economic Interests and the “Smart Border Declaration,”* 29 CAN-U.S. L.J. 21, 24 (2003) (explaining that over CDN \$2 billion in trade crosses the border daily).

combined.²¹ Recently, there have been more than 200 million border crossings each year between the two countries.²² And ninety-percent of all Canadians live within a hundred miles of the U.S. border.²³ Along the almost 5,000 mile border are also hundreds of rivers and lakes,²⁴ including the Great Lakes, which contains the world’s large surface freshwater system (over 20% of the world’s supply).²⁵ With such a large number of shared resources, globalization, and increased trade integration, disputes between the two countries are inevitable.²⁶

Indeed, at any particular time, numerous transboundary conflicts exist.²⁷ From a Canadian perspective, the impact of U.S. environmental and trade decisions are particularly acutely felt.²⁸

As Pierre Elliot Trudeau colorfully described it over thirty years ago – and as Jutta Brunnée has

²¹ Washington Canadian Embassy, United States-Canada: The World's Largest Trading Relationship, http://www.dfait-maeci.gc.ca/can-am/washington/trade_and_investment/wltr-en.asp (last visited Oct. 5, 2006)

²² Noriega, *supra* note x; see also Robert Hage, *The New Reality in Canada/U.S. Relations: Reconciling Security and Economic Interests and the “Smart Border Declaration,”* 29 CAN.-U.S. L.J. 21, 24 (2003) (“Fifty thousand peoples cross the border every day; and this is the statistic that I find so overwhelming, 200 million border crossings by people each year”).

²³ STATISTICS CANADA, 2001 CENSUS ANALYSIS SERIES: A PROFILE OF CANADIAN POPULATION – WHERE WE LIVE 1 (2001) (charting Canadian population trends) (on file with author).

²⁴ Catherine A. Cooper, *The Management of International Environmental Disputes in the Context of Canada-United States Relations: A Survey and Evaluation of Techniques and Mechanisms*, 24 CAN. Y.B. INT’L L. 247, 249 (1986); see also Joel A. Gallob, *Birth of the North American Transboundary Environmental Plaintiff: Transboundary Pollution and the 1979 Draft Treaty for Equal Access and Remedy*, 15 HARV. ENVTL. L. REV. 85, 112 (1991).

²⁵ J. David Prince, *State Control of Great Lakes Water Diversion*, 16 WM. MITCHELL L. REV. 107, 109 (1990).

²⁶ Lynton K. Caldwell, *Transboundary Conflicts: Resources and Environment*, in THE CANADA-UNITED STATES RELATIONSHIP: THE POLITICS OF ENERGY AND ENVIRONMENTAL COOPERATION 15 (Jonathan Lemco, ed. 1992) (“The topology and hydrology bisected by the political boundary dividing Canada and the United States makes binational environmental policy problems inevitable.”); see also Cooper, *supra* note x, at 249 (explaining that the geographic setting between the U.S. and Canada provide “ample opportunity for the generation of international environmental disputes”); John N. Hanson et al., *The Application of the United States Hazardous Waste Cleanup Law in the Canada-U.S. Context*, 18 CAN.-U.S. L.J. 137, 137-38 (1992) (stating that the “increasing integration of the Canadian and United States economies, a process accelerated by the Canada/United States Free Trade Agreement, and the tightening of environmental standards on both sides of the border, is likely to result in increased environmental litigation between Canadian and United States parties.”); David G. Lemarquand, *Preconditions to Cooperation in Canada-United States Boundary Waters*, 26 NAT. RESOURCES J. 221, 221-23 (1986) (describing the risk of transboundary water pollution and disputes between the two nations).

²⁷ Some examples of well-known Canadian-U.S. transboundary disputes include: the water quality of the great lakes, acid rain, air pollution, fresh water, hazardous waste disposal, and the depletion of other shared natural resources. See generally Parrish, *supra* note x, at 381-82.

²⁸ For a discussion of Canada’s staunch support for environmental law advancements, see Francois A. Mathys, *International Environmental Law: A Canadian Perspective*, 3 PACE Y.B. INT’L L. 91 (1991).

recently reminded us in the environmental context – living next to the United States is like sleeping next to an elephant: “[n]o matter how friendly and even-tempered is the beast . . . one is affected by every twitch and grunt.”²⁹

That transboundary disputes would develop, from time to time, however, has not traditionally been problematic. The U.S. and Canada’s ability to cooperate and peacefully resolve difference has always been considered unique. Nearly twenty years ago, the relationship was described in almost magical terms:

[I]n a world in which it sometimes seems that each country is at odds with every other, the Canada-U.S. relationship has sometimes looked like an island of tranquility in a sea of conflict . . . the idea that Canada and the U.S. had somehow developed a magic formula for achieving a happy international marriage³⁰

Certainly, the Canadian-U.S. relationship is often “hailed internationally as a model for cooperative issue resolution.”³¹ Traditionally a strong preference has existed for the two neighbors to resolve their disputes through diplomacy rather than through formal legal action.³²

²⁹ Pierre Elliott Trudeau, then Prime Minister of Canada, addressing the National Press Club in Washington, D.C., on US-Canada relations, 26 March 1969. Quotation No. 384, available at <http://www.bartleby.com/63/84/384.html>; see also Jutta Brunnée, *The United States and International Environmental Law*, 15 Eur. J. Int’l L. 617, 618 (2004) (noting that when it comes to environmental concerns, “the United States is the elephant next door”).

³⁰ Richard B. Bilder, Working Paper 8:4, *When Neighbors Quarrel: Canada-U.S. Dispute-Settlement Experience* 3-4 (May 1987) (on file with author); see also Michael Hart, *Disarming the “Undefended Border”: Reflections on the Rationale for a Canada-U.S. Customs Union*, in BUILDING A PARTNERSHIP: THE CANADA-UNITED STATES FREE TRADE AGREEMENT (Mordechai Kreinin ed., 2000) (quoting James Eayres that “Natural frontiers exist between nations, but the border between Canada and the United States is not one of them” and Sir Winston Churchill that the Canada-U.S. border is “guarded only by neighbourly respect and honorable obligations.”).

³¹ Roberts, *supra* note 4, at 2.

On the one hand, this cooperation may be the result of close cultural ties and a common history. Canada “share[s] a common law heritage in private law in liberal democratic and federal structures of government” and other historical, societal, and legal similarities.³³ For the majority of Canadians and Americans, the countries share a common language. Over 250,000 people living in Canada are Americans, or were born in the United States, while in the United States, there are over 630,000 people with Canadian ancestry.³⁴ Contact between the two nations is significant. As just one example, over “2.4 billion phone calls took place between [the] two countries in 2002.”³⁵ Not surprisingly, Canadians and Americans “tend to have closely similar attitudes, interests, and, arguably, a uniquely North American perspective and approach to problems.”³⁶

On the other hand, the existence of several diplomatic mechanisms and bilateral institutions have contributed to the historic success in the countries’ cooperative approach to transboundary disputes. Almost a century ago, the two countries “established the foundation for their bilateral

³² Erik B. Wang, *Adjudication of Canada-United States Disputes*, 19 CAN. Y.B. INT’L L. 158, 159 (1981) (citing Marcel Cadieux, former Ambassador of Canada to the United States), *Sixth Annual Conference of the Canadian Council on International Law, Ottawa, October 21, 1977*, 1 CAN-U.S. L.J. 19 (1978)).

³³ Gérard V. La Forest, *The Use of American Precedents in Canadian Courts*, 46 ME. L. REV. 211, 212-13 (1994) (noting that Canada and the U.S. share a “common law heritage in private law and in liberal democratic and federal structures of government” that are “peculiar to North American legal and societal development”); Sarah K. Harding, *Comparative Reasoning and Judicial Review*, 28 YALE J. INT’L L. 409, 412, 411 (2003) (explaining that “[a]s followers of the common law tradition, [Canada and the U.S.] adhere to similar interpretations of the rule of law, follow similar procedural and evidentiary rules, and believe strongly in the concept of stare decisis”).

³⁴ Hon. Marlene Jennings, *Session 12: The Future of the Evolving, Special Canada-U.S. Relationship: New Dimensions and Possible Future Progress and Concerns*, 31 CAN-U.S. L.J. 385, 385-86 (2005) (citing U.S. and Canadian census data).

³⁵ *Id.*

³⁶ Bilder, *supra* note 30, at 13.

relationship on environmental matters with the Boundary Waters Treaty of 1909.”³⁷ The treaty provides several means of addressing transboundary disputes related to waters flowing across the border, and it imposed obligations on the countries not to pollute boundary waters.³⁸ Since the 1909 Boundary Waters Treaty, the two countries have entered into literally hundreds of treaties that address a wide range of trade and environmental issues.³⁹

One of the lasting contributions to the Canadian-U.S. relationship that the Boundary Waters Treaty made was its creation of the International Joint Commission (IJC). Composed of six members (three from each country), the IJC is intended to be nonpolitical and impartial.⁴⁰ The IJC “provides transboundary oversight, research, and fact-finding for the two governments. . . .”⁴¹ It has the ability both to issue binding arbitral decisions, and conduct nonbinding investigative reports.⁴² While the binding procedures have not been utilized, dozens of issues have been referred to the IJC for nonbinding recommendations.⁴³ Until recently, the IJC has

³⁷ Noah Hall, *Bilateral Breakdown: Resolving U.S.-Canada Pollution Disputes*, 21 NAT. RES. & ENV. 18 (2006); see also Treaty Between the United States and Great Britain Relating to the Boundary Waters Between the United States and Canada, Jan. 11, 1909, U.S.-U.K., 36 Stat. 2448, T.I.A.S. No. 548, available at 1910 WL 19357.

³⁸ Boundary Waters Treaty, *supra* note 37, at 2450; see also F.J.E. Jordan, *Great Lakes Pollution: A Framework for Action*, 5 OTTAWA L. REV. 65, 68 (describing Canada’s insistence that a provision prohibiting pollution be included in the Boundary Waters Treaty).

³⁹ See *supra* note 3, and accompanying text; see generally, M. Graces Giorgi, *Transboundary Pollution Disputes Under the North American Free Trade Agreement*, 3 S.C. ENV’T L.J. 166, 174-77 (1994) (detailing the agreements and treaties between the U.S. and Canada relating to water, air, and hazardous waste). Another environmental area where the U.S. and Canada have a long history of cooperation is in the protection of migratory birds and animals. See, e.g., Convention on the Protection of Migratory Birds in the United States and Canada, Aug. 16, 1916, 39 Stat. 1702, TS 628, 12 Bevans 375.

⁴⁰ International Joint Commission, Who We Are, http://www.ijc.org/en/background/biogr_commiss.htm (last visited DATE 2006); see also PATRICIA BERNIE & ALAN BOYLE, INTERNATIONAL LAW & THE ENVIRONMENT 326 (2d ed. 2002) (praising the IJC’s “independence [from] both governments” as an “important and unusual characteristic”); L.H. Legault, *The Roles of Law and Diplomacy in Dispute Resolution: The IJC as a Possible Model*, 26 CAN.-U.S. L.J. 47, 49-50 (2000) (describing the Commissioner’s independence).

⁴¹ Caldwell, *supra* note 26, at 15.

⁴² Boundary Waters Treaty, *supra* note 37, Art. IX, at 2452 (referral procedures), Art. X, at 2453 (binding arbitration procedure); see also James G. Chandler & Michael J. Vechsler, *The Great-Lakes St. Lawrence River Basin from an IJC Perspective*, 18 CAN.-U.S. L.J. 261, 265-67 (1992) (describing the procedure for referring matters to the IJC for investigation and for binding arbitration).

⁴³ Erik B. Wang, *Adjudication of Canada-United States Disputes*, 19 CAN. Y.B. INT’L L. 159, 165 (1981) (stating that the IJC “has played an important role in the settlement” of transboundary water disputes and that “[i]n over one

received high grades for its ability to work quiet diplomacy as a gentle persuader.⁴⁴ The IJC “has always been praised as a low-key, behind the scenes actor that helps move governments to solutions the governments are prepared to accept.”⁴⁵ It is indeed “hard to quarrel with [the IJC’s] long record of success” as a “truly one of a kind system for the settlement of disputes.”⁴⁶

A more recent multilateral institution for resolving transboundary disputes developed from the environmental side agreement to NAFTA – the North American Agreement on Environmental Cooperation (the Side Agreement).⁴⁷ The Side Agreement’s purpose was to address regional environmental concerns, promote the effective enforcement of environmental laws, while preventing potential trade and environmental conflicts.⁴⁸ To accomplish this, the Side Agreement established the North American Commission on Environmental Cooperation (CEC). The CEC is “comprised of three parts: the Council (made up of cabinet-level environment ministers from the three countries); the Joint Public Advisory Committee (made up of fifteen appointed members, five from each of the three countries), and the Secretariat (a professional staff).”⁴⁹ In addition to

hundred cases referred to it from 1912 to date [1981] it has produced unanimous reports in all but four cases”); Jennifer Woodward, Note, *International Pollution Control: The United States and Canada – The International Joint Commission*, 9 N.Y.L. SCH. J. INT’L & COMP. L. 325, 329 (1988) (noting that from 1909 to 1972, over thirty-six references were sent to the IJC for nonbinding recommendations).

⁴⁴ Gregory S. Wetston & Armin Rosencranz, *Transboundary Air Pollution: The Search for an International Response*, 8 HARV. ENV’T L. REV. 89, 92 (1984) (noting that the “IJC is highly respected and its recommendations are very influential in both the United States and Canada”); Leonard W. Dworsky & Albert E. Utton, *Assessing North America’s Management of its Transboundary Waters*, 33 Nat. Resources J. 413, 416 (1993) (describing the IJC as a “model[] of success in many ways”); see INTERNATIONAL JOINT COMMISSION, CANADA AND THE UNITED STATES 2005 ANNUAL REPORT (2005) (summarizing Commission activities).

⁴⁵ Alan M. Schwartz, *Great Lakes: Great Rhetoric*, in TENSIONS AT THE BORDER: ENERGY AND ENVIRONMENTAL CONCERNS IN CANADA AND THE UNITED STATES 70 (Jonathan Lemco ed., 1992).

⁴⁶ Legault, *supra* note x, at 54.

⁴⁷ North American Agreement on Environmental Cooperation, U.S.- Mex.-Can, art. 14, Sept. 14, 1993, 32 I.L.M. 1480.

⁴⁸ John H. Knox & David L. Markell, *The Innovative North American Commission for Environmental Cooperation*, in GREENING NAFTA: THE NORTH AMERICAN COMMISSION FOR ENVIRONMENTAL COOPERATION 9, 9-12 (John H. Knox & David L. Markell eds., 2003) (describing CEC’s development from NAFTA).

⁴⁹ Michael J. Robinson-Dorn, *The Trail Smelter Is: What’s Past Prologue? The EPA Blazes a New Trail for CERCLA*, 14 N.Y. UNIV. ENV’T L.J. 233, 306 (2006) (citing to COMM’N FOR ENVTL. COOPERATION, LOOKING TO THE FUTURE: STRATEGIC PLAN OF THE COMMISSION FOR ENVIRONMENTAL COOPERATION 2005-2010, at 5 (2005)).

government-to-government claims, private actors are permitted to make submissions to the CEC if any of the state parties fail to effectively enforce their environmental laws.⁵⁰ The CEC is also empowered to investigate, develop factual records, and make nonbinding recommendations.⁵¹ In the last decade the CEC has taken an increasingly important role in resolving cross-border disagreements.⁵²

B. The Retreat From Bilateralism

Recently, however, bilateral or multilateral institutions such as the IJC and the CEC have been bypassed. The countries have stopped using the IJC with regularity or on important matters,⁵³ and very few CEC submissions are filed against the U.S.⁵⁴ At the same time, U.S.-Canadian transboundary disputes have become “increasingly protracted and difficult” to resolve.⁵⁵ Some commentators have gone so far as to “decr[y] the end of an era, arguing that the Canada-U.S. relationship has been irrevocably changed.”⁵⁶

⁵⁰ John H. Knox, *The 2005 Activity of the NAFTA Tribunals*, 100 AM. J. INT’L L. 429, 429, 438- (2006) (describing submissions by private parties under the NAFTA side agreements and the intergovernmental procedures).

⁵¹ Daniel C. Esty, *Good Governance at the Supranational Scale: Globalizing Administrative Law*, 115 YALE L.J. 1490, 1558 (2006) (describing the CEC and its operations).

⁵² GARY CLYDE HUFBAUER & JEFFREY J. SCHOTT, NAFTA REVISITED 157- 62 (2005) (describing work accomplished by the CEC); *see also* Carolyn L. Deere & Daniel C. Esty, *Trade and the Environment in the Americas: Overview of Key Issues*, in GREENING THE AMERICAS: NAFTA’S LESSONS FOR HEMISPHERIC TRADE 1, 2, 15 (Carolyn L. Deere & Daniel C. Esty eds., 2002) (describing the CEC’s role in addressing environmental and trade issues).

⁵³ Cite to Great Lakes Compact & Agreement;

⁵⁴ Knox [AMJIL 2006], *supra* note 50, at 440 (describing the low number of submission related to the United States).

⁵⁵ W.R. Derrick Sewell & Albert E. Utton, “*Getting to Yes*” in *United States-Canadian Water Disputes*, 26 NAT. RESOURCES J. 201, 201-03 (1986)

⁵⁶ Roberts, *supra* note 4, at 3; *see generally* TENSIONS AT THE BORDER: ENERGY AND ENVIRONMENTAL CONCERNS IN CANADA AND THE UNITED STATES (Jonathan Lemco ed., 1992) (describing tensions over climate change, acid rain, energy, and transboundary pollution). This is not the first time for such pessimism. In the 1980s, several scholars argued that the “vision of a unique Canadian-U.S. talent for dispute-settlement” was “more rhetoric than reality – a tinsel romance under only a paper moon.” Bilder, *supra* note 30, at 6.

From the closing of the U.S. border to Canadian beef and the softwood lumber impasse, to U.S. allegations of lax Canadian immigration laws and security at airports and other points of entry, and disputes over cross border waterways, navigating the border relationship has become more complicated.⁵⁷

To a large extent, the reason for this changed state of North American cooperation perhaps is symptomatic of the Bush Administration's environmental agenda, rather than any particular hostility to cooperating with Canada. The U.S. Environmental Protection Agency continues to work with Environment Canada on a number of joint scientific projects, such as air quality modeling and epidemiological testing. But American foot-dragging on the regulatory front is still an American withdrawal from cooperative institutions such as the IJC, and an opposition to the goals of these institutions. Indeed, the U.S. government has rejected or retreated from international law and mechanisms in a variety of contexts, not just with Canada.⁵⁸ Some academics have actively encouraged this disengagement, believing international law to somehow undermine democratic sovereignty.⁵⁹

⁵⁷ Roberts, *supra* note x, at 3.

⁵⁸ See generally Anupam Chander, *Globalization and Distrust*, 114 YALE L.J. 1193, 1197 (2005) (describing U.S. opposition to a "dazzlingly broad" range of international laws and institutions, including the ICC, the Kyoto Protocol, United Nations agencies, the Convention on the Law of the Sea, and the Comprehensive Test Ban Treaty); see also Jeffrey L. Dunoff, *Constitutional Conceits: The WTO's 'Constitution' and the Discipline of International Law*, 17 EUR. J. INT'L L. 647, 670 (2006) (The U.S. "in particular, has recently had a decidedly uneasy relationship with international legal norms and institutions, as illustrated by the refusal to ratify the Kyoto Protocol, the 'unsigning' of the Rome Treaty creating the International Criminal Court, the rejection of the Land Mines and Comprehensive Test Ban Treaties, the repudiation of the ABM treaty, and, perhaps most ominously, the assertion of a doctrine of preventive war that is in considerable tension with conventional understandings of the norms governing the use of force.").

⁵⁹ See generally Oona A. Hathaway & Ariel N. Lavinbuk, Book Review, *Rationalism and Revisionism in International Law*, 119 HARV. L. REV. 1404 (2006) (reviewing *The Limits of International Law* and describing the revisionist movement to undermine the use of international law because of its perceived inconsistency with democratic governance); see, e.g., JACK L. GOLDSMITH & ERIC A. POSNER, *THE LIMITS OF INTERNATIONAL LAW* (2005) (presenting a critical, negative view of international law and a disdain for international institutions); Paul B. Stephan, *Sheriff or Prisoner? The United States and the World Trade Organization*, 1 CHI. J. INT'L L. 49, 73 (2000); Paul B. Stephan, *International Governance and American Democracy*, 1 CHI. J. INT'L L. 237 (2000); John R. Bolton, *Should We Take Global Governance Seriously?*, 1 CHI. J. INT'L L. 205 (2000); Curtis A. Bradley & Jack L.

American acts of unilateralism – from Devils Lake to Baghdad – then are not so much explicit rejections of the notion of cooperation, but of the willingness to forego cooperation when it suits American needs. Seeking cooperation on other fronts – such as attempting to curb North Korean appetites for nuclear weapons by working with China and South Korea, or establishing the Asia-Pacific Partnership on Green Development and Climate to rival the Kyoto Protocol – convey a willingness to cooperate when it suits other American interests. But such opportunistic cooperation is not, of course, cooperation.

Americans have thus withdrawn from formal diplomacy or international arbitration, and undertaken unilateral actions to obtain relief. Some of the most well-known and contentious disputes include:

- **Softwood Lumber:** The protracted softwood lumber dispute, where the United States eschewed NAFTA dispute resolution processes in levying duties on Canadian imports of softwood lumber.⁶⁰
- **The Trail Smelter:** The ongoing Teck Cominco smelter dispute, where the U.S. EPA and a private citizen's group filed suit under the U.S. Superfund law against Teck, operating solely in Canada, for transboundary pollution.⁶¹

Goldsmith, III, *The Current Illegitimacy of International Human Rights Litigation*, 66 *FORDHAM L. REV.* 319 (1997); Curtis A. Bradley & Jack L. Goldsmith, *Customary International Law as Federal Common Law: A Critique of the Modern Position*, 110 *HARV. L. REV.* 815 (1997).

⁶⁰ An agreement between Canadian Prime Minister Stephen Harper and U.S. President George W. Bush has, for the time being, quelled the decades-long dispute and arranged for the return of 80% of the collected duties to Canadian softwood lumber exporters. For a pre-agreement review of the legal wrangling, see Raj Bhala & David A. Gantz, *WTO Case Review 2004*, 22 *ARIZ. J. INT'L & COMP. L.* 99, 174-200 (2005).

⁶¹ *Pakootas v. Teck Cominco Metals, Ltd.*, 35 *Env'tl. L. Rep.* 20,083 (E.D. Wash. 2005) (order denying motion to dismiss on jurisdictional grounds), *aff'd*, 452 F.3d 1066 (9th Cir. 2005); see generally Austen L. Parrish, *Trail Smelter Déjà vu: Extraterritoriality, International Environmental Law, and the Search for Solutions to Canadian-*

- **The Devil’s Lake Project:** The State of North Dakota’s plan to build a diversion channel to drain a polluted lake into a river that runs into Canada.⁶²

Numerous other disputes loom on the horizon.⁶³ With Americans turning their backs on bilateral or multilateral institutions such as the IJC and the CEC, orderly resolution of these disputes are unlikely.

The preference to resolve transboundary disputes through domestic litigation and the extraterritorial application of U.S. laws, at least from an American perspective, appears to be growing. American environmentalists cheer what they perceive to be a potential race-to-the-top through the use of domestic lawsuits.⁶⁴ Others argue that transnational decision-making is legitimate and consistent with deliberative democracy.⁶⁵ Certainly, the traditional barriers to relief to bringing suit in a domestic court – such as the doctrines of choice of law, comity, forum non conveniens, personal jurisdiction, and judgment enforcement – no longer seem

U.S. Transboundary Water Pollution Disputes, 85 B.U. L. REV. 363 (2005). Several academics have now commented on the case, *see, e.g.*, Craik, *supra* note 65; Bruneo, *supra* note x; Robinson-Dorn, *supra* note 49.

⁶² Province of Manitoba v. Norton, 398 F. Supp. 2d 41 (D.D.C. 2005); *see generally* John Knox, *Environment: Garrison Dam, the Columbia River, the IJC and NGOs*, 30 CAN-U.S. L.J. x (2004); *see also* Sheryl A. Rosenberg, *A Canadian Perspective on the Devils Lake Outlet: Towards An Environmental Assessment Model for Management of Transboundary Disputes*, 76 N.D. L. REV. 817 (2000).

⁶³ *See, e.g.*,

⁶⁴ Robinson-Dorn, *supra* note 49, at 315-19 (arguing that a race to the top is a good thing and encouraging the extraterritorial application of domestic laws); Gallob, *supra* note 24, at 135-48 (arguing for court-based solutions to transboundary pollution problems); Rachel Kastenber, Note, *Closing the Liability Gap in the International Transboundary Water Pollution Regime Using Domestic Law to Hold Polluters Accountable: A Case Study of Pakootas v. Teck Cominco, Ltd.*, 7 OR. L. REV. INT’L L. 322 (2005); *cf.* Noah D. Hall, *Transboundary Pollution: Harmonizing International and Domestic Law*, X UNIV. OF MICH. J. OF L. REFORM (2007) (forthcoming); Noah D. Hall, *Bilateral Breakdown: Resolving U.S.-Canada Pollution Disputes*, 21 NAT. RESOURCES & ENVIRONMENT 18, x (2006) (“Ideally, we could allow domestic litigation to resolve these disputes in a way that strengthens, not undermines, the United States-Canada relationship.”).

⁶⁵ Neil Craik, *Deliberation and Legitimacy in Transnational Environmental Governance: The Case of Environmental Impact Assessment*, INTERNATIONAL LAW & JUSTICE WORKING PAPERS (Oct. 2006), *available at*.

insurmountable.⁶⁶ And in the U.S., the extraterritorial application of U.S. laws to foreigners, including Canadians, has become almost commonplace.⁶⁷

The U.S. rejection of bilateralism has left Canada in a quandary. With the U.S. unwilling to use traditional mechanisms to solve transboundary environmental disputes – embracing a go-it-alone strategy – how should Canada address U.S. pollution effecting Canadians? This is particularly problematic because outside of the bilateral institutions, Canada has a weak bargaining position vis-à-vis the U.S.⁶⁸ One particularly intractable problem, from which the U.S. has now withdrawn meaningful engagement, is Ontario's transboundary air pollution problem.

II. ONTARIO'S TRANSBOUNDARY AIR POLLUTION PROBLEM

One of the most important problems facing Ontario is transboundary air pollution originating from the United States. Unfortunately, despite various attempts, the Ontario government has had

⁶⁶ Parrish, *supra* note x, at 380-401 (describing how the traditional limitations to domestic law, in the form of personal jurisdiction, and foreign enforcement of judgments no longer exist in the United States); Paul B. Stephan, *A Becoming Modesty: U.S. Litigation in the Mirror of International Law*, 52 DEPAUL L. REV. 627, 631-38 (2002) (describing how U.S. courts have sought to wide their influence internationally with "shifts in doctrines such as personal jurisdiction, forum non conveniens, comity, and choice of law"); Joel A. Gallob, *Birth of the North American Transboundary Environmental Plaintiff: Transboundary Pollution and the 1979 Draft Treaty for Equal Access Remedy*, 15 HARV. ENV'T L. REV. 85 (1991) (concluding that the transboundary plaintiff is emerging as a result of changes to the laws of jurisdiction, standing, and choice of law); *cf.* Austen L. Parrish, *Sovereignty, Not Due Process*, 41 WAKE FOREST L. REV. 1, 18-25 (2006) (describing the modern personal jurisdiction doctrine as to foreign, non-U.S. defendants and listing cases finding personal jurisdiction over Canadian defendants).

⁶⁷ Randall S. Abate, *Dawn of a New Era in Extraterritorial Application of U.S. Environmental Statutes: A Proposal for an Integrated Judicial Standard Based on the Continuum of Context*, 31 COLUM. J. ENV'T L. 87, 118-137 (2006). CITE TO ANTITRUST, SECURITIES LAW AND CRIMINAL LAW EXAMPLES.

⁶⁸ Bilder, *supra* note x, at 12 ("The U.S. has a population almost ten times that of Canada, a gross national product almost thirteen times larger than that of Canada, and vastly superior military strength. . . . This means that, based on considerations of power alone, the U.S. should in theory almost always come out ahead in any negotiation or controversy."). It is interesting to note how self-conscious Canadians are of the nature this relationship. Foreign Affairs and International Trade Canada, in a 2001 profiling of former Prime Minister Pierre Elliott Trudeau, noted Trudeau's propensities to seek independence from the U.S. by, among other things, adopting a foreign trade policy dubbed the "Third Option," to increase trade with countries other than the U.S. However, as the article acknowledged, "...incidents in the early 1970s demonstrated Canadian vulnerability vis-à-vis its neighbour. In 1971, the Nixon administration sought to right its balance of trade problems by slapping a surcharge on imports, including from Canada." Foreign Affairs and International Trade Canada, *Canada World View*, Issue 10, Winter 2001, available online at <http://www.international.gc.ca/canada-magazine/issue10/10t5-en.asp> .

little success in solving this problem. As described below, recent studies suggest Ontario can no longer ignore this problem.

A. The Air Pollution Problem

The first significant transboundary air pollution case involved air pollution emanating from Canada, ironically involving the very same Trail, B.C. smelter that is now the target of the EPA, Washington State, and the Colville Tribe.⁶⁹ This dispute was referred to an IJC tribunal, which was able to resolve the dispute, albeit over the course of a decade and a half. Of course, air pollution has more often crossed the border in the other direction, and long been an irritant in U.S.-Canada relations. For decades, transboundary air pollution, including SO₂ emissions from coal-fired power plants, and NO_x emissions from a variety of combustion sources, have been the primary cause of acid rain in Southern Ontario and Quebec. Bilateral efforts to curb emissions of SO₂ and NO_x on both sides of the border began in earnest in 1966, when the IJC established a sub-body called the International Air Quality Advisory Board to advise both national governments on transboundary air issues.⁷⁰ In 1980, the U.S. and Canada signed a Memorandum of Intent regarding Transboundary Air Pollution, aspiring to jointly solve the problem. A series of joint reports followed, and in 1991, President George H.W. Bush and Prime Minister Brian

⁶⁹ In 1906, the predecessor to Teck Cominco, the Consolidated Mining and Smelting Company (Cominco), operated the same smelter in Trail, British Columbia that is now the target of the EPA, Washington State, and the Colville Tribe. In 1925 and 1927, Cominco raised the height of the smoke stacks on the facility, reducing local pollution and sending it further afield, including destinations in Washington State. At the same time, it increased its output, doubling the amount of sulfur emitted from its taller smokestacks. Subsequent complaints from Washington State led to a referral of the dispute to the International Joint Commission, which assessed a \$350,000 penalty against Canada, and required Cominco to limit its sulfur emissions. Improvements were modest, however, and in 1935, following some more complaints from the American side, another tribunal was formed to deal specifically with the Trail smelter. This tribunal again awarded the U.S. damages, though less than the amount requested, and required Cominco to reduce emissions. .

⁷⁰ International Joint Commission, International Air Quality Advisory Board, What is the International Air Quality Advisory Board? http://www.ijc.org/conseil_board/air_quality_board/en/iaqab_home_accueil.htm.

Mulroney, in what was considered in Canada to be one of his few accomplishments,⁷¹ signed the Air Quality Agreement. Progress under the Agreement has occurred in fits and starts, but due in large part to the 1990 Clean Air Act Amendments that imposed an emissions trading program for power plant emissions of SO₂, transboundary transport of SO₂ declined substantially in the 1990s. However, the trend on the U.S. side since 2000 has been away from reducing air pollution, not continuing the movement forward.

There is a renewed urgency to reducing transboundary air pollution, and SO₂ in particular. Whereas the contribution of SO₂ to acid rain is well-known, only recently has it become known that it is also a precursor of fine particulate matter (PM_{2.5})⁷² Being microscopic, fine particulate matter is small enough to be inhaled and lodge in lung tissue, where it can become carcinogenic or aggravate other lung diseases. A number of epidemiological studies have recently fingered fine particulate matter, and ground-level ozone to a lesser degree, as the most important pollution contributors to premature deaths and other illnesses. The statistics are sobering. A 2005 study commissioned by the Ontario Environment Ministry estimated that fine particulate matter and ozone annually cause 4,881 premature deaths, 18,480 hospital admissions, 21,875 emergency room visits, and 2,119,608 minor illnesses. These adverse health outcomes impose substantial costs in the form of direct and indirect health care costs, loss of productivity and tax revenue, and the imputed value of loss of life. Ontario estimates that air pollution causes more than \$6.6

⁷¹ Prime Minister Mulroney, forced out of office in 1993, has generally not enjoyed a favorable retrospect on his leadership. However, some Canadian environmentalists have recently lauded his environmental record, most notably the signing of the Air Quality Agreement. Corporate Knights (April 20, 2006), The Greenest PM in Canadian History, 3-4, available online at http://www.corporateknights.ca/downloads/earth_gala_program.pdf#search=%22mulroney%20air%20quality%20agreement%20elizabeth%20may%22 .

⁷² Fine particulate matter, microscopic airborne solid or liquid particles, is the by-product of virtually any combustion process. The 2.5 subscript denotes the maximum diameter, in microns, of particulate matter that is considered "fine." Particulate matter, denoted PM₁₀, is smaller than 10 microns in diameter, but larger than 2.5 microns in diameter.

billion annually, amounting to \$600 for every man, woman and child in Ontario, or \$1,000 for every man, woman, and child in the Toronto metro area, where most of the health effects are concentrated. Of these figures, roughly more than half are attributable to U.S.-created pollution.⁷³ The harm that air pollution causes generally is even greater: \$9.6 billion each year, with \$5.2 billion (over 55%) attributable to transboundary pollution from the U.S.

B. Prior Attempts to Solve The Problem

For Ontario, finding a way to make the U.S. take its environmental concerns seriously and reduce transboundary pollution seems to Ontarians to be a perennial problem, despite a shared history of reasonable cooperation on environmental problems. But recently, bilateral and multilateral efforts have seemed completely fruitless.

The 1991 Air Quality Agreement⁷⁴ bound the U.S. and Canada to reduce SO₂ and nitrogen oxides (NO_x) emissions. Most recently, in 2000, the two countries agreed upon an Ozone Annex to the Air Quality Agreement, which contained very specific obligations for both countries to reduce emissions of NO_x and volatile organic gases. Canada, for example, agreed to work towards aligning its motor-vehicle-emission regulations with U.S. standards, cap NO_x emissions from Ontario power plants at 39 kilotons, and reduce emissions from a variety of coating and refinishing operations, among other things. In a similar vein, the U.S. agreed to call for new state implementation plans under the Clean Air Act, requiring states to submit new plans to reduce NO_x emissions, a regulatory action known as the NO_x SIP Call. The U.S. also obligated itself to implement VOC emissions reductions from a list of forty-one types of emitters, and implement

⁷³ Ontario Ministry of the Environment, *Transboundary Air Pollution in Ontario* 59 (Table 4.3), June 2005, available online at http://www.ene.gov.on.ca/envision/techdocs/5158e_index.htm

⁷⁴ International Joint Commission, <http://www.ijc.org/rel/agree/air.html>

performance standards for new emissions sources in thirty-five categories.⁷⁵ The 2000 Ozone Annex reads like a highly-detailed and ambitious recipe for harmonizing standards on both sides of the U.S.-Canada border.

But the Air Quality Agreement and the companion Ozone Annex have had limited success; the IJC has not been able to compel the countries to cooperate. Momentum from Clinton Administration initiatives, such as the NO_x SIP Call, reduced emissions well into the Bush Administration. But progress on the legal and regulatory front has stalled since 2000. Although NO_x emissions have continued a downward decline begun in 1997,⁷⁶ the lack of progress on SO₂ emissions is troubling. Emissions from electric generating plants, which were in a substantial decline from 1980 to 2000, have plateaued.⁷⁷

One need not look far to uncover the reason for this lack of progress. No regulatory or legislative initiatives have taken place to reduce SO₂ emissions since the 1990 Clean Air Amendments. Although President Bush has proposed a further tightening of the original SO₂ cap under his "Clear Skies" initiative, he has been unable to push that initiative through Congress. And the initiative is not likely to be passed anytime soon. Competing air pollution proposals, which are more ambitious than Clear Skies and also address greenhouse gas regulation, have politically stalemated Congress. The reduction of SO₂ emissions has thus become a hostage to partisan wrangling and been shelved in favor of more politically salient issues such as terrorism.

⁷⁵ Annex 3 to Canada-U.S. Air Quality Agreement, online at http://www.ec.gc.ca/cleanair-airpur/CAOL/air/can_usa_e.html

⁷⁶ International Joint Commission, United States Canada Air Quality Agreement, Progress Report 2004 4 (fig. 3), 20 (fig. 12), available online at <http://www.epa.gov/airmarkets/usca/airus04.pdf>

⁷⁷ International Joint Commission, United States Canada Air Quality Agreement, Progress Report 2004 2 (fig. 2), available online at <http://www.epa.gov/airmarkets/usca/airus04.pdf>

Diplomatic efforts and informal negotiation have fared no better than the legal mechanisms. This is not for lack of trying. Laurel Broten, Ontario's Minister of the Environment, has missed few opportunities to remind Americans that air pollution emitted in the U.S. affects Canadians.⁷⁸ Through U.S. counsel, the Minister submitted comments to the Bush Administration's proposed New Source Review reforms. Those reforms would have weakened Clean Air Act regulations that mandate the upgrade of pollution control equipment whenever a new pollution source is constructed or substantially modified.⁷⁹ The Minister's comments, however, fell on deaf ears. At the very least, as far as environmental policy is concerned, the Minister's input was less influential than that of many other stakeholders in the Bush Administration.

Of course, blame does not lie solely with the United States. To be sure, Ontario has its own house cleaning to do. Canadian environmental organizations have often criticized Ontario's smog plan as being insufficiently ambitious, and even a bit misleading.⁸⁰ Ontario recently shelved a plan to retire all of its coal-fired power plants by 2007. First the Ontario government admitted that it did not have the means to replace the electricity generating capacity of those plants until 2009, and then, under pressure, conceded that even 2009 might be too ambitious.⁸¹ But the fact that Ontario must also hold its own polluters to account does not mean that it may ignore U.S.

⁷⁸ The Minister has addressed the National Press Club in Washington, D.C. (speech notes available at <http://www.ene.gov.on.ca/envision/news/speeches/051006.htm>), filed an amicus brief in the case of U.S. v. Cinergy (available online at <http://www.ene.gov.on.ca/envision/air/transboundary/CinergyAppeal.pdf>), and convened a special executive committee on transboundary air pollution (see media briefing at <http://www.ene.gov.on.ca/envision/air/transboundary/CinergyAppeal.pdf>).

⁷⁹ available online at <http://www.ene.gov.on.ca/envision/air/transboundary/fullnsrcomments.pdf>

⁸⁰ International Joint Commission, Synthesis of Public Comment on the 2004 Progress Report under the Canada/United States Air Quality Agreement ___ (2006), available online at

⁸¹ In a 2003 campaign promise, Ontario Liberal Party leader Dalton McGuinty promised to close all coal-fired power plants by 2007. McGuinty, now Ontario's Premier, admits that the province will not be able to get by without those power plants in 2007, and must delay that shut-down date to 2009, another target date that has been called into question. See, CBC.ca, Liberals will delay closing two coal plants past 2009, June 9, 2006, online at http://www.cbc.ca/canada/toronto/story/2006/06/09/topower_20060609.html; Liberals Take Heat over Coal Power Plants on Day of Record May Consumption, May 26, 2006, online at http://www.cbc.ca/canada/toronto/story/2006/05/30/tocoalplants_20060530.html.

pollution for the time being. Transboundary harm of this magnitude certainly requires some effort to coax Americans along in their efforts to reduce transboundary air pollution.

In light of the U.S.'s failure to cooperate, or even appear concerned about Ontario's pollution problems, it would appear that Canada is left to fend for itself. It may be time for Canada – and Ontario, in particular – to consider a unilateral approach.⁸² Left with few options, Ontario should explore the use of domestic lawsuits to provide an avenue for its citizens to obtain redress for transboundary environmental harm from responsible parties located in the U.S.

III. EXPLORING DOMESTIC SOLUTIONS

For the first time, domestic litigation may be a reasonable alternative for Canadians when diplomatic and bilateral dispute resolution procedures have failed. In particular, Ontario may learn from the strategy British Columbia employed in recovering health care costs against tobacco manufacturers in the recent landmark case, *British Columbia v. Imperial Tobacco Canada*.⁸³ After explaining why the traditional obstacles to domestic litigation no longer exist, the article explains why domestic litigation may be a desirable alternative for Ontario, and how the *Imperial Tobacco* case may lead the way.

A. The Traditional Obstacles To Domestic Litigation

A number of legal hurdles need to be cleared for there to be a realistic cause of action and remedy for Ontario residents. Traditionally, three of the most insurmountable have been:

⁸² Interestingly, the newly-elected leader of Canada's Green Party called for a renegotiation of NAFTA, saying that "it works for the U.S., but not for Canada." CBC.ca, August 27, 2006, <http://www.cbc.ca/story/canada/national/2006/08/26/greens.html> (last visited on August 27, 2006). The surprising thing about this position is that many Canadian environmentalists have been pleased that U.S. duties have curtailed some of the most ecologically destructive and inefficient logging practices in Canada.

⁸³ 2005 SCC 49.

1. **Jurisdictional Barriers:** The local action rule, personal jurisdiction doctrines, and the presumption against extraterritoriality have in the past rendered Canadian courts ill-suited to address transboundary environmental harms.
2. **Causation-Defendant Identification:** The inability to assign blame to particular defendants (i.e. to prove causation) usually hampers environmental litigation. Since no Canadian statute currently exists that reaches the U.S. emitters, pinning responsibility on any individual emitter or reasonable group of emitters presents a challenge.
3. **Causation-Plaintiff Identification:** Historically, identifying *which persons* die prematurely from lung disease, cardiopulmonary disease, and other illnesses caused by air pollution was problematic. These kinds of deaths and diseases have other potential causes.

As described below, however, a confluence of factors may mean that these hurdles are not as high as they once were. For the first time, Ontario may have a legal pathway to obtaining compensation for the human health and environmental harms that U.S.-created air pollution causes.

1. The Jurisdictional Barriers

For a long time, jurisdictional obstacles prevented Canadians from suing Americans for environmental damage caused by pollution originating in the U.S.⁸⁴ The first barrier to relief

⁸⁴ Michael I. Jeffery, Q.C., *Transboundary Pollution and Cross-Border Remedies*, 18 Can. U.S. L.J. 173, 173-74 (1992) (“Until recently, most plaintiffs in who the U.S. and Canada who suffered damage from a source of pollution originating outside the jurisdiction in which the damage occurred, faced formidable obstacles in obtaining redress.”); see also Stephen C. McCaffrey, *Private Remedies for Transfrontier Pollution Damages in Canada and the United*

was the local action rule. That long-standing common law rule of subject of matter jurisdiction provided, in broadest terms, that “an action in tort for damage to real property must be brought where the property is located.”⁸⁵ Although the local action rule was more liberally applied in the U.S.,⁸⁶ the English common law from which the Canadian and U.S. rule derived⁸⁷ excluded “all types of trespass to foreign land.....”⁸⁸ Chief Justice Baxter of the New Brunswick Supreme Court once famously explained it succinctly: “[A]n action founded on trespass to realty in a foreign country whether the title does or does not come into question cannot be tried here.”⁸⁹ The rule thus prevented Canadian citizens from filing suits in the U.S. against Americans for harm felt in Canada. Cases where Canadian residents have successfully sued U.S. corporations for pollution originating from the U.S., therefore, have been rare.⁹⁰ In fact, until the mid-1970s, no

States: A Comparative Survey, 19 U. W. Ontario L. Rev. 35 (1981) (describing access problems for private suits). Indeed, the local action rule prevented private lawsuits against the Trail Smelter, leading to the famous *Trail Smelter Arbitration*. EDITH BROWN WEISS ET AL., *INTERNATIONAL ENVIRONMENTAL LAW & POLICY* 262 (1998)

⁸⁵ Gallob, *supra* note x, at 96; *see also* *British South Africa Co. v. Companhia de Mocambique* [1893] A.C. 602, 62 L.J.Q.B. 70 (H.L.), *rev'g* [1892] Q.B. 358 (C.A.). The *Mocambique* case was the seminal case that established the local action rule.

⁸⁶ *See* Note, *The Proposed Canada-United States Transboundary Air Pollution Agreement: The Legal Background*, 20 CAN. Y.B. INT'L L. 219, 238 (1982) (describing the U.S. approach); Jeffery, *supra* note x, at 174-76 (explaining how U.S. courts interpreted the local action rule more broadly than their Canadian counterparts); Fairley, *supra* note x, at 264-67 (describing the broader traditional approach of U.S. courts to the local action rule); McCaffrey, *supra* note x, at 221-24 (describing the “American courts’ disenchantment with the local action rule”).

⁸⁷ English courts had “no jurisdiction to entertain actions where the facts occurred abroad” because of the “ancient common law practice whereby juries were chosen from persons acquainted with the facts of a case, who therefore decided questions of fact from their own knowledge and not from evidence of witnesses.” H. Scott Fairley, *Private Remedies for Transboundary Injury in Canada and the United States: Constraints Upon Having to Sue Where You Can Collect*, 10 OTTAWA L. REV. 253 (1978) (quoting from J. MORRIS, *THE CONFLICT OF LAWS* 293 (1971)).

⁸⁸ Gallob, *supra* note x, at 96-97; William K. King, *Transboundary Pollution: Canadian Jurisdiction*, 1 Can-Am. L.J. 1, 9-14 (1982) (describing the Canadian approach to the local action rule in detail); McCaffrey, *supra* note x, at 218-19 [CWILJ] (describing the local action rule and why it presented a barrier to suit); *see also* *Rylands v. Fletcher*, L.R. 1 Exch. 265 (1866), L.R. 3 H.L. 330 (1868).

⁸⁹ *Albert v. Fraser Companies Ltd.*, 1 D.L.R. 329 (1927) (C.A. N.B.); *see also* *Breton v. C.P.R.*, 29 O.R. 57 (H.C. 1898); *Boslund v. Abbotsford Lumber, Mining and Development Co.*, 34 B.C.R. 485, [1925] 1 W.W.R. 475. [1925] 1 D.L.R. 978 (S.C.).

⁹⁰ For a notable exception, *see* *Mitchie v. Great Lakes Steel Division, National Steel Corp.*, 495 F.2d 213, *aff'd*, 419 U.S. 997 (1974) (where thirty-seven Canadian residents sued three Michigan corporations for nuisance arising from the discharge of air pollutants, but ultimately settled out of court); *see* Jon Ricci, *Transboundary Air Pollution Between Canada and the United States: Paper Solutions to a Real Problem*, 5 J. Int'l L. & Prac. 305, 308-09 (1996) (describing *Mitchie* case and settlement); *see generally* McCaffrey, *supra* note x, at 36 [WOLR] (noting that “In view of the seriousness of the [transboundary pollution] problem, it is somewhat surprising that there are not more reported lawsuits.”).

recorded decision existed involving Canadians suing Americans in a U.S. court for transboundary pollution.⁹¹ Unfamiliarity with the legal system, the costs of bringing suit abroad, and the perception of bias (real or imagined)⁹² also practically discouraged Canadians from suing in U.S. courts.⁹³

Not only were Canadians unlikely to succeed if they filed an action in the U.S., they were also unlikely to sue successfully in a domestic court. In Canada, subject matter jurisdiction would likely not be a problem,⁹⁴ but personal jurisdiction would be. Indeed, traditional concepts of personal jurisdiction – derived from international law concepts of territorial sovereignty – prevented lawsuits where the defendant was not present.⁹⁵ “Extraterritorial service of process was unknown at common law.”⁹⁶ Jurisdiction ended at the border.⁹⁷ Although Canadian courts

⁹¹ McCaffrey, *supra* note x, at 220 [CWILJ].

⁹² Kevin M. Clermont & Theodore Eisenberg, *Xenophilia in American Courts*, 109 Harv. L. Rev. 1120, 1121-22, 1143 (1996) (exploring reasons why foreigners fear U.S. courts, and concluding that foreigners do not fare badly in U.S. litigation and that bias does not exist); *cf.* Kevin R. Johnson, *Why Alienage Jurisdiction? Historical Foundations and Modern Justification for Federal Jurisdiction Over Disputes Involving Noncitizens*, 21 Yale J. Int'l L. 1, 35 (1996) (describing current bias that exists against foreign citizens); *see generally* Parrish, *supra* note x, at 45, nn. 221-22 (describing debate over whether bias exists against foreign citizens).

⁹³ Parrish, *supra* note x, at 42-50 (describing the unique burdens for foreigners litigating in U.S. courts) [Wake Forest article]; *see also* Parrish, *supra* note x, at 409 (describing perception of bias by Canadians that U.S. courts will favor U.S. interests in transboundary pollution disputes) [BULR].

⁹⁴ *Phillips v. Eyre* [1870] 6 Q.B. 1 (finding that suit may be brought in England for a wrongful act committed abroad if: (1) the wrong is of a character that it have been actionable if committed in England; and (2) the act could not be justified by the law of the place where it occurred); *see generally* McCaffrey, *supra* note x, at 240 [CWLJ] (explaining why subject matter jurisdiction would not be an obstacle to suit in Canada for transboundary harm originating in the U.S.).

⁹⁵ Parrish, *supra* note x, at 8-10 [Wake Forest]; *see also* McCaffrey, *supra* note x, at 217, 239-42 [CWILJ] (“In some transnational pollution actions it will be impossible to bring defendant [sic] before a court at the place of the injury since the conditions necessary for assertion of personal jurisdiction will not be present.”). *See also* Roger H. Transgrud, *The Federal Common Law of Personal Jurisdiction*, 57 Geo. Wash. L. Rev. 849, 872 & nn.116-20 (1989) (describing how the original rules of jurisdiction were based on rules of territorial sovereignty, and listing early cases that approached jurisdiction based on the Law of Nations).

⁹⁶ McCaffrey, *supra* note x, at 241; *see also* *Penny v. Neff*, 95 U.S. 714 (1877). Service of a summons on an absent defendant, not present in the forum, became possible after Order 11 of the English Rules of the Supreme Court. [1962] 3 Stat. Instr. 2529, 2552 (No. 2145).

⁹⁷ *See generally* James Weinstein, *The Dutch Influence on the Conception of Judicial Jurisdiction in 19th Century America*, 38 Am. J. Comp. L. 73, 74-85 (1990) (describing early American jurisdictional theories based on international territoriality principles developed by Dutch theorists); Max Rheinstein, *The Constitutional Bases of Jurisdiction*, 22 U. Chi. L. Rev. 775, 796-808 (1955) (describing how the American colonies inherited jurisdictional

have now recognized the effects test⁹⁸ – permitting jurisdiction when effects are felt within the province – courts have been hesitant to exercise personal jurisdiction over foreign defendants “with respect to the pursuit of transboundary mischief matters.”⁹⁹ Even in the late 1970s, “judicial minds remain[ed] very sensitive [in Canada] to any modality which [might] be considered as constituting inappropriate interference with another jurisdiction.”¹⁰⁰ Traditionally then, the local action rule combined with the personal jurisdiction doctrine, prevented private lawsuits for transboundary harms.¹⁰¹ The famous *Trail Smelter* Arbitration has often been cited as an example where these two rules combined to prevent any private rights action.¹⁰² In fact, the 1909 Boundary Waters Treaty was drafted precisely because at the time there existed “no remedies or redress” for transboundary harms.¹⁰³

But jurisdictional barriers were not the only barriers to relief. In Canada, the statutory authority defense would also often prevent litigation. “[I]f properly invoked, [the statutory authority

principles from international law that recognized territorial borders as the key limitation on a sovereign’s authority and jurisdiction).

⁹⁸ *Moran v. Pyle Nat’l (Can.) Ltd.*, [1974] D.L.R.3d 239, 250-51 (Can.) (finding personal jurisdiction when foreseeable harm could be caused in another province); *Jenner v. Sun Oil Co.*, [1952] D.L.R. 526 (Ont. High Ct. J.) (finding jurisdiction over American defendant in a defamation case, even though the defamatory words were not written or ushered in the jurisdiction when “they were so transmitted as to be published within the jurisdiction in such a manner as to be likely to cause the plaintiff to suffer substantially in his reputation in Ontario.”)

⁹⁹ Fairley, *supra* note x, at 268-69.

¹⁰⁰ Fairley, *supra* note x, at 268 (citing *Interprovincial Cooperatives Ltd. v. The Queen in Right of Manitoba* [1976] 1 S.C.R. 477, [1975] W.W.R. 382, 53 D.L.R. (3d) 321, *rev’g* [1973] 3 W.W.R. 673, 38 D.L.R. (3d) 367 (Man. C.A.), *rev’g* [1972] 5 W.W.R. 581, 30 D.L.R. (3d) 166 (Man. Q.B.)).

¹⁰¹ Fairley, *supra* note x, at 278 (noting that “Canadian legal precedents tend to be unnecessarily restrictive in respect” to transboundary pollution claims).

¹⁰² WEISS ET AL., *supra* note x, at 262 (describing the traditional jurisdictional hurdles to private litigation in the context of the *Trail Smelter* Arbitration); DAVID HUNTER ET AL., *INTERNATIONAL ENVIRONMENTAL LAW AND POLICY* 511 (2d ed. 2002) (same).

¹⁰³ X Scott, *The Canadian-American Boundary Waters Treaty: Why Article II?*, 36 CAN. B. REV. 511, 518, n.15 (1958) (quoting the Draft Press Release, prepared for Secretary Knox, in Chandler P. Anderson Papers, Manuscript Division, Library of Congress) (“[T]he treaty proceeds to establish a new rule for the benefit and protection of those interests, on either side of the boundary . . . there being, under existing conditions no remedies or redress in such cases.”); *see also* Stephen C. McCaffrey, *Transboundary Pollution Injuries: Jurisdictional Considerations in Private Litigation Between Canada and the United States*, 3 CAL. W. INT’L L.J. 191, 196(1973) (discussing reasons for 1909 Boundary Waters Treaty and quoting Chandler P. Anderson).

defense] may provide a complete defense.”¹⁰⁴ This is because in “most Canadian jurisdictions, many activities which cause pollution in one form or another are permitted by statutes.”¹⁰⁵ As explained in the seminal case, *Manchester v. Farnworth*, “[w]hen Parliament has authorized a certain thing to be made or done in a certain place, there can be no action for nuisance caused by the making or doing so authorized.”¹⁰⁶ Even if federal or provincial environmental legislation existed, it was limited and “not as prevalent in Canada as it is in the United States.”¹⁰⁷ Standing doctrines, as interpreted in Canada, also at one time would create practical problems to redress.¹⁰⁸ Even modern environmental legislation – such as Ontario’s Environmental Protection Act – would traditionally be assumed to apply only to conduct occurring within the province.¹⁰⁹ And, of course, even if a judgment could be secured, enforcing the judgment against a defendant without assets in the jurisdiction could well be futile.¹¹⁰ Even more practically, the relatively small size of damage awards, the lack of contingency fees, the unavailability of jury trials, and the reality that the losing parties usually pay attorneys fees have also made Canadian litigation less attractive.¹¹¹

¹⁰⁴ Jeffery, *supra* note x, at 175.

¹⁰⁵ *Id.* at 175 (citing examples, such as *Smiley v. Ottawa*, 2 D.L.R. 390 (1941) (Ont.); *B.C. Pea Growers Ltd. v. Portage La Prairie*, 43 D.L.R.2d 713 (1963) (Q.B. Man.); *North Vancouver v. McKenzie Barge & Marine Ways Ltd.*, S.C. 377 (1965) (Can.).

¹⁰⁶ *Manchester v. Farnworth*, A.C. 171 (1930) (H.L. U.K.).

¹⁰⁷ Jeffery, *supra* note x, at 182-83.

¹⁰⁸ Jeffery, *supra* note x, at 179.

¹⁰⁹ McCaffrey, *supra* note x, at 195 [CWILJ] (describing the traditional “reluctan[ce] to grant injunctive relief because of the possibility that such would be viewed as an attempt to impose regulations on a foreign activity and as an improper interference with the economic affairs of a foreign state”); *see generally* Allan E. Gotlieb, *Extraterritoriality: A Canadian Perspective*, 5 N.W. J. INT’L L. & BUS. 449, 457-59 (1983) (describing the Canadian approach to extraterritoriality, its concern over U.S. extraterritorial application of laws, and the enactment of defensive legislation); David Leyton-Brown, *Extraterritoriality in Canadian-American Relations*, 36 INT’L J. 185, 205-06 (1980) (describing instances of extraterritorial U.S. laws impacting Canada and describing the relative lack of Canadian laws applied extraterritorially).

¹¹⁰ Cite to Judgment Enforcement cites; *see also* McCaffrey, *supra* note x, at 217, 252-56 [CWILJ] (“Further, if a defendant has no assets within the jurisdiction in which the injury occurred, he might simply disregard any proceedings there, forcing plaintiff to obtain a default judgment of uncertain enforceability in defendant’s country.”).

¹¹¹ McCaffrey, *supra* note x, at 62-63 [WOLR]; *cf.* John S. Willems, *Shutting the U.S. Courthouse Door?: Forum Non Conveniens in International Arbitration*, DISP. RESOL. J., Aug.-Oct. 2003, at 54, 56 (“Litigants are

Times have changed. The legal impediments to Canadians suing Americans for U.S.-originated pollution “are being removed gradually by many jurisdictions in what may be characterized as a more focused attempt to prevent or curtail polluting activities and to ensure that those responsible bear the costs. . . .”¹¹² By the 1970s, personal jurisdiction law had developed in Canada to permit suit “in transboundary pollution cases founded on nuisance and trespass theories. . . .”¹¹³ In a seminal article in 1973, Stephen McCaffrey concluded that although transboundary pollution cases might be difficult to prosecute, at least “the courts’ doors are open.”¹¹⁴ And in 1986, several American states and Canadian provinces – including Ontario¹¹⁵ – signed the Uniform Transboundary Reciprocal Access Act. That Act, originating from the Canadian and American Bar Associations, sought “to provide a remedy to actual or potential victims of transboundary pollution in the courts of the polluter’s residence if a victim residing within the country of origin would have had a remedy for that same pollution harm.”¹¹⁶ Although the two nations have not accepted the Draft Treaty,¹¹⁷ and it has not been widely adopted by the states and provinces,¹¹⁸ Americans and Canadians are nevertheless now “accustomed to asserting their rights and seeking redress for wrongs in each other’s courts.”¹¹⁹

attracted to the high quality of the U.S. courts, the willingness of U.S. courts to exercise jurisdiction over international disputes, and, rightly or wrongly, the belief that U.S. courts are ready to award large sums of damages.”)

¹¹² Jeffery, *supra* note x, at 194.

¹¹³ McCaffrey, *supra* note x, at 249 [CWILJ].

¹¹⁴ McCaffrey, *supra* note x, at 259 [CWILJ].

¹¹⁵ Uniform Transboundary Pollution Reciprocal Access Act, R.S.O. ch. T-18 (1990) (Ont.).

¹¹⁶ Gallob, *supra* note x, at 92.

¹¹⁷ WEISS ET AL., *supra* note x, at x; Gallob, *supra* note x, at 92.

¹¹⁸ John H. Knox, *The CEC and Transboundary Pollution*, in GREENING NAFTA: THE NORTH AMERICAN COMMISSION FOR ENVIRONMENTAL COOPERATION 80, 87-88 (David L. Markell & John H. Knox eds., 2003).

¹¹⁹ Wang, *supra* note x, at 182 (describing the reliance on domestic law in U.S. and Canadian disputes).

2. Causation – Defendant Identification

If a plaintiff was able to navigate the various jurisdictional barriers to suit, historically proving that the defendant caused the transboundary harm was a challenge. The common law was not receptive to recovery when there were several possible defendants, let alone thousands. Where a discrete and identifiable source of pollution from a single defendant imposed measurable harm, an action in nuisance would lie to abate the environmental harm, or, in a modern case, provide for a damages remedy. But modern pollution problems involving less discernible pollutants from multiple sources, such as SO₂, VOCs, NO_x, and PM_{2.5} that are emitted by literally millions of polluters, are ill-fitted for traditional tort remedies.

A comparison of two cases, decided almost a century apart, underscores the problem. In *Missouri v. Illinois*,¹²⁰ the City of St. Louis was unsuccessful in its attempt to enjoin the City of Chicago from flushing its untreated sewage into the Des Plaines River, which feeds into the Illinois River, which empties into the Mississippi River just 43 miles upstream of St. Louis. A credible case was made that Chicago's sewage contributed to a second typhoid outbreak in St. Louis. But the Court denied relief, noting that several other plausible explanations existed for the outbreak, and that therefore the plaintiff had failed to prove the defendant caused the harm. This multiple-cause problem continues to create problems for recovery. Recently, the House of Lords grappled with the same sort of multiple cause issue in *Fairchild v. Glenhaven Funeral Services*.¹²¹ There, the court found it necessary to explain, in a long and convoluted way, why an asbestos worker who died from the asbestos-related disease mesothelioma, was entitled to recover in tort against both firms that had employed him in asbestos-related occupations. It

¹²⁰ 200 U.S. 496 (1906).

¹²¹ [2002] UKHL 22 (House of Lords).

seems incredible that it was necessary for the United Kingdom's highest court – 72 years after the establishment of a link between asbestos and the lung disease mesothelioma – to have to overrule a lower court, which remarkably held that neither firm was liable.

Given the common law hurdles in recovering against multiple defendants, modern environmental statutes imposed regulations that attempted, *ex ante*, to prevent harm, and also in some cases to provide an *ex post* remedy. In fact, modern environmental statutes emerged precisely because of the common law's inability to deal with certain kinds of environmental insults. But, of course, these statutes only provided relief when legislatures specifically created a remedy. In the absence of a legislative response, recovery against multiple defendants, all of which could have but might not have caused the harm, has remained unlikely.

Yet a modern trend may be emerging to counter this traditional bias against common law and statutory remedies. The increased use of statistical inferences in court proceedings and legislation suggest that courts are more receptive to finding causation than they once were. Two recent cases are instructive. *Agency for Health Care Administration v. Associated Industries of Florida*¹²² involved the application of a Florida statute, which enabled Florida to recover from tobacco manufactures tobacco-related health care costs. The Florida Supreme Court upheld the use of a "market-share" theory of liability,¹²³ permitting the plaintiffs to recover against the defendants based on the defendant's market share in the tobacco products that likely led to

¹²² 678 So. 1239 (Fla. 1994). Significantly, the court stated in dicta that joint and several liability was also possible, although not as a concurrent theory with market-share liability.

¹²³ The seminal case upholding the theory of market share liability was *Sindell v. Abbott Laboratoires*, 26 Cal. 3d. 588 (1980).

illness.¹²⁴ It further held that the use of statistical evidence in finding liability was not constitutionally infirm.¹²⁵ A similar approach was also used recently by the province of British Columbia, which copied aspects of the Florida statute and then sought recovery against several foreign and Canadian tobacco makers. The B.C. statute contained the same provisions for market-share liability and statistical evidence that were in the Florida statute. The B.C. statute also had a provision that reversed the burden of proof in favor of the province.¹²⁶ In *British Columbia v. Imperial Tobacco*, the Supreme Court of Canada upheld the statute in all respects, including its extraterritorial application to the nonresident tobacco manufacturers.¹²⁷

This emerging trend in the use of statistical evidence – a key to the continued rise of market-share liability – comes just in time to promote a theory of liability based on pollution contribution, or pollution share, which Ontario can use to address its transboundary air pollution problems. Because epidemiological research over the past twenty years has yielded strong statistical links between certain types of air pollution and certain types of adverse human health effects (including premature death), Ontario plaintiffs can now credibly argue that U.S. pollution emissions led to some statistical "harm," even if it those plaintiffs cannot show it was the specific U.S. defendant's pollution that led to illness or death.¹²⁸ Pollution modeling, monitoring, and reporting technology is probably accurate enough to be admitted as evidence in court. At the very least, the science has advanced enough to serve as a legitimate basis for legislative and

¹²⁴ *Id.*, at 1255-56.

¹²⁵ *Id.*, at 1256.

¹²⁶ Tobacco Damages and Health Care Costs Recovery Act, S.B.C. Ch. 30, §3(2). The government must first prove, however, that "on a balance of probabilities," that the defendant breached a common law duty to persons exposed to tobacco products, that exposure can cause or contribute to the disease, and that the tobacco product involved was sold in British Columbia by the defendant. §3(1)(a)-(c).

¹²⁷ *British Columbia v. Imperial Tobacco Canada Ltd.* 2005 SCC 49.

¹²⁸ For a discussion on the nature of harm in tort law and environmental law, see Albert Lin, *The Unifying Role of Harm in Environmental Law*, 2006 WISC. L. REV. 897 (2006).

regulatory action. While the causal chain from pollution to adverse health outcome is not yet as documented as that for tobacco and lung diseases, conceptually, the differences between a tobacco lawsuit and an air pollution lawsuit have disappeared.

Science and technology sufficiently link pollution to health harms in several ways to overcome the traditional difficulties in proving causation. First, measuring the amount of pollution that a power plant emits has become relatively simple. Aided by reporting requirements, the EPA maintains a database that allows a user to find out how much SO₂ a specific power plant emitted in a given year. The EPA's EGrid database¹²⁹ allows users to run individualized search queries by power plant, power plant owner, location, fuel type, and over a hundred other characteristics. Most importantly, the EGrid database provides information on emissions of NO_x, SO₂, carbon dioxide, and mercury.

Second, science can now link pollution at the smokestack with pollution to the place where the alleged health and environmental damages occur. Sophisticated air quality models have forged this link. Drawing largely on modeling efforts headed up by the EPA, Ontario agencies have developed a 3-dimensional model that can track the movement of pollution for thousands of miles. For the most part, regulatory agencies have used models of this type in the past to evaluate the pollution reduction effects of proposed regulations. These models can incorporate the effects that motor vehicles, airplanes, clouds, forest fires, seasonal variations in temperature and precipitation, and a variety of other factors, have on pollution levels at the endpoint.¹³⁰ The

¹²⁹ U.S. Environmental Protection Agency, Clean Energy: EGrid Database, available online at <http://www.epa.gov/cleanenergy/egrid/download.htm>

¹³⁰ Modelling Efforts to Evaluate Transboundary Influences and the Effects of Natural Sources on Ozone and PM_{2.5} Levels in Ontario, Chapter 6 in Preliminary Application and Evaluation of the Provisions of the Guidance

Ontario Environment Ministry used the model to measure the effect of transboundary pollution by zeroing out pollution from Ontario sources and natural sources and imputing the rest to pollution emanating from the U.S.

This linking is particularly straightforward with SO₂ and NO_x emissions. Coal-fired power plants account for almost all of the SO₂ pollution and a significant amount of NO_x pollution. Imputing a specific amount of pollution to certain specific coal-fired power plants, or to other polluting facilities, would not be a difficult task for air quality modelers. Zeroing out the contributions of selected power plants and other emitters would produce estimates of the transboundary air pollution attributable to these facilities. The result would be the basis for Ontario's health and environmental damage claims.

3. Causation – Plaintiffs Identification

The final legal hurdle traditionally faced in attempting to hold U.S. polluters liable for transboundary pollution is for Ontario to identify the appropriate plaintiffs. Litigation is rarely conducted when it is unclear who has been harmed. Jurisprudential considerations require this. Among other reasons, knowing the plaintiff's identity is typically essential to determine whether standing requirements have been met.

But exceptions exist. There are cases where *someone* is known to have been harmed, although the person's identity cannot be determined. In these circumstances, if the harm is serious enough, adjudication is considered appropriate, even if additional work is necessary to identify the

Document on Achievement Determination for the PM_{2.5} and Ozone Canada-wide Standards, report submitted to the Ontario Ministry of the Environment and Environment Canada, February 2005.

victims. In class action lawsuits, for example, a large class of victims may suffer so small an injury that individual victims are unlikely to absorb the transaction costs of stepping forward to make a claim.¹³¹ In such cases, an effort to broadly notify possible plaintiffs of potential claims is common, along with a process to make claim filing relative simple. In those cases, the approach is necessary and worthwhile to provide a pared-down remedy; the alternative being no recovery at all.

This approach is not limited to traditional class actions. The *Associated Industries of Florida* and *Imperial Tobacco* cases represent a new genre of litigation involving unidentifiable plaintiffs. In these cases, statistical inference was used to plead that *some people*, not necessarily named persons, were harmed, sometimes fatally, by their use of tobacco products. British Columbia followed Florida's lead when it drafted a statute that explicitly provided a cause of action and a remedy for the province for the health care costs the province absorbed in caring for those suffering from tobacco-related illness.

Good reason exists to believe that Ontario – based on these cases – should be able to bring a suit involving unidentifiable plaintiffs harmed by transboundary pollution. Admittedly, making the statistical case that air pollution leads to adverse health outcomes is not as straightforward as linking tobacco use to lung disease. Yet the science and modeling linking air pollution to adverse health outcomes, already extensively relied upon for environmental policymaking, is ready for the test of litigation. By now, scores of studies have tracked fluctuations in pollution, in particular particulate matter, with health outcomes. Changes in health outcomes have been

¹³¹ Craig Jones, *Class Action Suits* (2004).

studied in the presence of events that change pollution levels, such as a strike at a local steel mill,¹³² a ban on coal sales,¹³³ and new restrictions on the sulfur content of fuel oil.¹³⁴

In addition to the event studies described above, scientists have also conducted other, more reliable, long-term time series studies, and even more reliable “cohort,” or panel data studies, which track the health outcomes of large groups of individuals over long time periods.

Researchers have carefully scrutinized two studies in particular – one tracking over 500,000 people over nine years,¹³⁵ and one tracking over 8000 people in six cities over fourteen to sixteen years (known as the "Harvard Six Cities Study").¹³⁶ These studies found and measured a statistically significant relationship between long-term levels of particulate matter pollution and premature mortality. Because of their crucial findings, and because of the statistical issues involved, a third-party consultant vetted the studies and subjected them to a "reanalysis." The independent consultant then published a 97-page "condensed" report,¹³⁷ which essentially corroborated the original researchers' findings. The conclusions were compelling enough that the

¹³² C.Arden Pope III, Joel Schwartz, M. Ransom, Daily Mortality and PM₁₀ pollution in Utah Valley, 42 Archives of Environmental Health 211 (1992).

¹³³ L. Clancy, P. Goodman, H. Sinclair, and Douglas W. Dockery, Effect of Air Pollution Control on Death Rates in Dublin, Ireland: an Intervention Study, 360 Lancet 1210 (2002).

¹³⁴ A.J. Hedley, C.M. Wong, T.Q. Thach, T.H. Ma S. Lam, H.R. Anderson,

¹³⁵ C.Arden Pope III, Michael J. Thun, MM Namboodiri, Douglas W. Dockery, John S. Evans, Frank E. Speizer and C.W. Heath Jr., Particulate air pollution as a predictor of mortality in a prospective study of U.S. adults 151 AM. J. RESPIRATORY AND CRITICAL CARE MEDICINE 669 (1995).

¹³⁶ Douglas W. Dockery, C. Arden Pope III, Xiping Xu, John D. Spengler, James H. Ware, Martha E. Fay, Benjamin G. Ferris, Frank E. Speizer, An Association Between Air Pollution and Mortality in Six U.S. Cities, 329 New England Journal of Medicine 1753 (1993).

¹³⁷ Health Effects Institute, Special Report: Reanalysis of the Harvard Six Cities Study and the American Cancer Society Study of Particulate Air Pollution and Mortality, available online at <http://pubs.healtheffects.org/view.php?id=6> (2000) (last visited October 8, 2006). The Public Statement to the Report stated that the "[R]eanalysis assured the quality of the original data, replicated the original results, and tested those results against alternative risk models and analytic approaches without substantively altering the original findings of an association between indicators of particulate matter air pollution and mortality." Health Effects Institute, Synopsis of the Particle Epidemiology Reanalysis Project (2000), available online at same site as above. In other words, the Health Effects Institute found the study to be accurate and reliable.

EPA in 1997 relied upon them heavily in setting a National Ambient Air Quality Standard for fine particulate matter.¹³⁸

The original Harvard Six Cities Study does not stand alone. Since the mid-1990s, dozens of new studies and follow-ups have been conducted – including a follow-up to the Harvard Six Cities Study – further solidifying and quantifying the link between particulate matter and adverse health outcomes.¹³⁹ Of course, these studies statistically separated out the effects of air pollution from other potential causes, such as smoking, diet, exercise, and a variety of other factors that affect health outcomes.

The reports commissioned by the Ontario Medical Association (OMA) have drawn upon this literature to estimate the effects of air pollution on Ontarians. The OMA developed a special computer model, Illness Costs of Air Pollution (ICAP), to take as inputs air quality and population data, and calculates, using relationships derived in the air quality modeling and health effects literature, a projected number of premature deaths, hospital admissions, emergency room visits, and minor illnesses. Originally developed to help Ontario perform cost-benefit analyses of various air pollution reduction strategies, ICAP has more recently been used to estimate the contribution of different sources of pollution to the overall pollution problem. By varying the pollution amount, different policy scenarios can be evaluated for their pollution effects and

¹³⁸ U.S. Environmental Protection Agency, National Ambient Air Quality Standards for Particulate Matter: Proposed Decision, 61 FED. REG. 65638-01 (December 13, 1996).

¹³⁹ Francine Laden, Joel Schwartz, Frank E. Speizer, and Douglas W. Dockery, Reduction in Fine Particulate Air Pollution and Mortality: Extended Follow-up of the Harvard Six Cities Study, 173 AM. J. RESPIRATORY AND CRITICAL CARE MEDICINE 667 (2006); C. Arden Pope III, Richard T. Burnett, Michael J. Thun, Eugenia E. Calle, Daniel Krewski, Kazuhiko Ito, George D. Thurston, Lung Cancer, Cardiopulmonary Mortality, and Long-term Exposure to Fine Particulate Air Pollution, 287 Journal of the American Medical Association 1132 (2002); See, DSS Management Consultants, Phase II: Estimating Health and Economic Damages: Illness Costs of Air Pollution 54-64 (2000) (hereinafter "DSS Report"), for an extensive list of articles on air pollution and health effects.

resulting costs. Similarly, by using the results of air quality models that measure the contributions of different individual air polluters, ICAP can estimate the damages that individual air polluters cause. ICAP incorporates a wide range of economic costs associated with adverse health outcomes, such as the value of a lost life,¹⁴⁰ loss in economic productivity, direct health care costs, loss in quality of life, and *risk* of death. Despite the many categories of economic cost associated with adverse health outcomes, ICAP seems to err on the side of conservative estimates, going so far as to deduct health care costs for some cases where premature mortality enables Ontario to avoid caring for a person because of her death.¹⁴¹

Other economic costs of pollution, such as the environmental costs, are less contentious.

Damages due to acid rain are easily distinguishable from other potential damages – the distinct washing away and erosion of solid structures caused by acid rain is a unique identifying feature of this form of pollution. The unique blackening and erosion of statues is an unfortunately clear sign of acid rain. The damages of such tangible structures are not trivial to measure, but suffer no conceptual leaps as statistical analysis does. Similarly, damages to crops and forests by way of lost productivity is not a subject that economists will hotly contest.

Are these estimates ready for the rigor and scrutiny of litigation? Only the courts can say for sure, but courts have in the past used statistical evidence to gauge damages. Securities litigation often relies heavily on statistical analysis to bolster assertions that some illicit trade yielded gains to the defendant, from alterations in the price. Antitrust litigation also often relies upon statistical

¹⁴⁰ An extensive literature exists on estimating the value of life for policy-making purposes. Often called the "value of a statistical life," or "VSL," the dollar value assigned to a life lost to pollution or some other risk is the most controversial aspect of cost-benefit analysis. Some estimates of VSL are based on contingent valuation surveys, which query subjects how much they would be willing to pay to avoid certain risks of death. Other estimates of VSL are based upon risk premiums paid to workers in high-risk professions such as construction.

¹⁴¹ DSS Report, *supra*, note 139, at 22.

analysis to show that market power exists¹⁴² or that prices are higher than they otherwise would be,¹⁴³ thus aiding in the measure of damages.

In the *Associated Industries of Florida* and *Imperial Tobacco* cases, statistical evidence was presented as to the number of victims of tobacco use for which health care costs were incurred by, Florida and British Columbia, respectively. In *Associated Industries of Florida*, the Florida Supreme Court, while upholding most aspects of the statute giving rise to the cause of action, struck down the provision that allowed Florida to only provide statistical evidence of the cost of making Medicare payments, and avoid identifying each individual recipient for whom recovery is sought.¹⁴⁴ To do so, the court held, would violate due process guarantees under the Florida Constitution, by preventing defendants from rebutting the statutorily-created presumption, and contesting the propriety of individual Medicare payments.¹⁴⁵

Canadian courts had no such trouble in *Imperial Tobacco*. The British Columbia statute provides, in language similar to the Florida statute, that "If the government seeks in an action under subsection (1) to recover the cost of health care benefits on an aggregate basis ... it is not necessary ... to identify particular individual insured persons ... to prove the cause of tobacco related disease in any particular individual insured person, or ... to prove the cost of health care benefits for any particular individual insured person...."¹⁴⁶ The British Columbia statute does provide that the court "may order discovery of a statistically meaningful sample of the

¹⁴² *U.S. v. Microsoft*, 84 F. Supp. 2d 9 (1999).

¹⁴³ *FTC v. Staples*, 970 F. Supp. 1066 (1997).

¹⁴⁴ 678 So. 2d at 1253-54.

¹⁴⁵ *Id.*

¹⁴⁶ Tobacco Damages and Health Care Costs Recovery Act, S.B.C., 2000, ch. 30, § 2(5).

documents [that identify recipients]..."¹⁴⁷ Finally, the statute provides that "[s]tatistical information and information derived from epidemiological, sociological and other relevant studies, including information derived from sampling, is admissible as evidence for the purposes of establishing causation and quantifying damages or the cost of health care benefits...."¹⁴⁸

The plaintiff identifiability issue was briefed and argued at the trial court level, which held that the provision did not interfere with the independence of the judiciary, and would not necessarily prevent defendant from rebutting the statutory presumption.¹⁴⁹ The Supreme Court of Canada, in upholding the British Columbia statute in all respects, did not even address the issue of identifying the victims of tobacco use, despite an extended discussion of judicial independence and the "rule of law." Whether this was a conscious or inadvertent omission on the part of the Court, it appears that the law of Canada would not preclude recovery on the basis of a statistical presentation of the victims of air pollution. While a court hearing a transboundary air pollution case would surely have to grapple with the issue of the quality of statistical evidence in such a case, it seems that evidence of air pollution would at least be met with reasonably open judicial minds.

Air pollution data, because of the nature of the statistical evidence, cannot *possibly* identify the specific victims of air pollution. All that is known is that of a population dying prematurely from some lung ailment, a certain percentage of that is likely to be due to air pollution, rather than smoking, hereditary reasons, or other causes. If Canadian courts were as concerned with due process concerns as the Florida Supreme Court was, then this might be a problem. But if the

¹⁴⁷ Tobacco Damages and Health Care Costs Recovery Act, S.B.C., 2000, ch. 30, § 2(5)(d).

¹⁴⁸ Tobacco Damages and Health Care Costs Recovery Act, S.B.C., 2000, ch. 30, § 5.

¹⁴⁹ *British Columbia v. Imperial Tobacco Ltd.*, 2003 BCSC 877, 227 D.L.R. (4th) 323, ¶¶27-90.

Imperial Tobacco cases are any indication, then Canadian courts are likely to concern themselves with whether defendants will have an opportunity to rebut any evidentiary assertions produced by ICAP or other models used to establish damages. This seems like a less onerous proposition, and unlikely to pose a threat to recovery.

B. Following The Lead of *Imperial Tobacco* and Others

The *Imperial Tobacco* case almost provides a recipe for how to create a remedy for harm from transboundary air pollution. First, a self-serving statute is drafted specifically to provide a remedy for a harm that may or may not be addressed by common law causes of action. The statute may, under *Imperial Tobacco*, take certain liberties with norms of procedure. It may reverse the burden of proof so that defendants must prove the absence of harm; it may allow plaintiff Ontario to present statistical evidence of causation, including the outputs of air pollution models; it may allow plaintiff Ontario to present statistical evidence of harm, including the outputs of air pollution and epidemiological models; and it may provide that liability can be imposed on the basis of individual polluters' contributions to an air pollution problem, *or* jointly and severally.¹⁵⁰ Second, a lawsuit is brought under the statute, targeting the largest polluters that contribute to transboundary air pollution. To be sure, comity would require that substantial Ontario polluters also be defendants to the action. For those interested in remedying environmental harm, however, this may be a political problem but not a legal one.

¹⁵⁰ Although the Florida Supreme Court upheld the use of both forms of liability, it held that they cannot be concurrent theories of liability. 678 So. 2d. at 1255-56.

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The nature of an air pollution lawsuit also presents some possible common law causes of action. Public nuisance has emerged as one of the more promising theories in "public tort" lawsuits¹⁵¹ seeking relief against defendants that are associated with widespread harms. Public nuisance has been advanced as a theory of recovery in lawsuits against handgun manufacturers and distributors,¹⁵² lead paint manufacturers,¹⁵³ electric utilities (for carbon dioxide emissions),¹⁵⁴ and automobile manufacturers (also for carbon dioxide emissions).¹⁵⁵ To date, the results have been mixed, with courts showing some reluctance to impose liability for the manufacture of lawful products,¹⁵⁶ and where, in the case of handguns, the harm is imposed not by the manufacturer but some third-party using the handgun.¹⁵⁷ At the same time, courts have been willing to move away from traditional doctrinal restrictions, as limiting recovery to noxious land uses and precluding recovery against activities that are heavily regulated and conducted legally can be found to be nuisances.¹⁵⁸

Air pollution, found to be a nuisance in numerous cases, would seem to be an ideal candidate for a fix to Ontario's transboundary air pollution problem. The Restatement of Torts standard for

¹⁵¹ Richard C. Ausness, Public Tort Litigation: Public Benefit or Public Nuisance? 77 Temple L. Rev. 825 (2004).

¹⁵² Gary v. Smith & Wesson, 801 N.E.2d 1222, 1234-35 (Ind. 2003); James v. Arms Tech, Inc., 820 A. 2d. 27, 34 (N.J. Sup. Ct. App. Div. 2003); Cincinnati v. Beretta USA Corp., 768 N.E. 2d 1136, 1140 (Ohio 2002).

¹⁵³ Milwaukee v. NL Industries, 691 N.W. 2d. 888, 890 (Wis. Ct. App. 2004); Rhode Island v. Lead Industries, 2004 WL 1542236 (Sup. Ct. R.I. 2004); *but see* Chicago v. American Cyanamid, 823 N.E. 2d. 126 (Ill. Ct. App. 2005).

¹⁵⁴ Connecticut v. American Electric Power Co., filed in the Federal District Court, Southern District of N.Y., May 12, 2004.

¹⁵⁵ California v. General Motors, filed in the Federal District Court, Northern District of California, September 20, 2006, complaint available online at http://ag.ca.gov/newsalerts/cms06/06-082_0a.pdf?PHPSESSID=eaed5ba7ba56ff216a765f34a3fe423c

¹⁵⁶ Ausness, *supra*, note 151, at 871.

¹⁵⁷ Ausness, *supra*, note 151, at 874-77.

¹⁵⁸ Gary v. Smith & Wesson, 801 N.E.2d 1222, 1234-35 (Ind. 2003); James v. Arms Tech, Inc., 820 A. 2d. 27, 34 (N.J. Sup. Ct. App. Div. 2003); Cincinnati v. Beretta USA Corp., 768 N.E. 2d 1136, 1140 (Ohio 2002).

recovery, an intentional and unreasonable interference with the use and enjoyment of land,¹⁵⁹ contemplates that some balancing between the gravity of harm and the utility of defendant's conduct determine whether the interference is "unreasonable."¹⁶⁰ Liability for air pollution has almost always involved activities that are productive and legal, so courts would likely be skeptical of a defendant's argument that their activity, even if as important as electricity generation, is so important enough an activity as to outweigh the harm, especially with a plethora of pollution reduction measures and alternative electricity generating sources available. As well, a nuisance action may be more likely to lead to relief than in the past because the gravity of the harm has become so much clearer with improved statistical evidence of the number of people who sicken and die from air pollution.

The one potentially fatal problem with utilizing a nuisance theory to recover for this kind of air pollution is that it may require that individual defendants to a nuisance suit be more than de minimus contributors to the air pollution problem. This would be fatal to efforts to hold electric utilities liable for greenhouse gas emissions, and possibly damaging to a prospective suit by Ontario to recoup air pollution costs.

Another possibility is to invoke *parens patriae* in a suit by Ontario to protect Ontario's citizens. This is certainly not an unprecedented use of *parens patriae*, having been invoked in the landmark air pollution case *Georgia v. Tennessee Copper*.¹⁶¹ The Canadian Supreme Court has looked favorably upon *parens patriae* as a means of sovereigns recovering for the loss of Crown

¹⁵⁹ Restatement (Second) of Torts, §822.

¹⁶⁰ Restatement (Second) of Torts, §826(a).

¹⁶¹ 206 U.S. 230 (1907).

goods and property.¹⁶² *Parens patriae* has traditionally been limited to cases involving "quasi-sovereign" interests,¹⁶³ which typically include the abatement of air and water pollution.¹⁶⁴ But a traditional limitation on *parens patriae* has been that most cases have targeted behavior that was either tortious or illegal.¹⁶⁵ The use of *parens patriae* in the past is such that it provides a mechanism for standing, but not a new substantive cause of action.¹⁶⁶

Jurisprudential considerations call for some caution when allowing lawsuits to go forward without actually having a named, identified victim or plaintiff in court. However, the nature of many modern injuries, especially environmental ones, are such that harm can be certain but unsusceptible of a precise location or effect in an individual case. Courts have adapted to these modern realities in the past, by allowing class action lawsuits, for example. Allowing recovery in environmental cases is a logical continuation of this trend.

CONCLUSION

When the Congress of the United States has dithered and failed to address significant public health and environmental problems, public tort litigation has stepped into the breach, albeit not always successfully. Some have been critical of the trend to seek mass adjudication of claims regarding dangerous pharmaceutical products, asbestos, lead paint, tobacco products, handguns,

¹⁶² *British Columbia v. Canadian Forest Products*, 2004 SCC 38, ¶9.

¹⁶³ *State v. Dover*, ___ N.H. ___ (2006); but see, *Estados Unidos Mexicanos v. DeCoster*, 229 F.3d 332 (1st Cir. 2000) ("The U.S. Supreme Court has never recognized *parens patriae* standing in a foreign nation where only quasi-sovereign interests are at stake. The justifications offered to support *parens patriae* standing in the individual States of the Union are not applicable here.").

¹⁶⁴ *United States EPA v. Green Forest*, 921 F.2d 1394 [47] (8th Cir. 1990); *Burch v. Goodyar Tire & Rubber Co.*, 420 F. Supp. 82 (Dist. Md. 1976) ("The state's interest as *parens patriae* is most evident when it seeks to preserve its natural resources, or when it asks protection for the health of its citizens.").

¹⁶⁵ *Ausness*, supra, note 151, at 861-62 (2004).

¹⁶⁶ *Id.*

and even global climate change.¹⁶⁷ But even if public tort litigation does truly raise separation of powers questions, even if they become messy affairs, it is hard to argue that they do not address important public policy questions that Congress has ducked. In that sense, public tort litigation complements those institutions of first resort where orderly regulation is desirable.

In the same vein, transboundary litigation is hardly a first-best solution. When the countries, however, shun the transnational institutions that were meant to be the primary arbiters of that type of dispute, secondary measures are called for. Canadians can try to persuade Americans to return to a cooperative model of dispute resolution, once again embracing institutions such as the IJC, CEC, and NAFTA, or Canadians could lament the decline of these institutions, *or* Canadians can institute a counter-measure to compel Americans to return to a more bilateral or multilateral view of transnational law. A reciprocal response in the form of transnational litigation is that counter-measure. In particular, a lawsuit to remedy or abate harm from transboundary air pollution in southern Ontario is one that is measured, just, and perfectly-adapted to fill a gap left by the declining influence of the IJC.

Would such a lawsuit be more than a symbolic gesture? The answer is not as clear-cut as in the case of *Imperial Tobacco*. But while the problem of air pollution will not yield the mountain of favorable evidence that tobacco plaintiffs have at their disposal, the science and technology of air pollution and health outcomes has advanced greatly in recent decades, and there is reason for cautious optimism. The evidence has certainly been sufficient for legislatures and regulators to act, and should now be considered sufficient for courts to adjudicate. Certainly, the numbers, if they are believed, are compelling: the almost 2700 U.S. air pollution-related deaths each year is

¹⁶⁷ Ausness, *supra*, note 151, at 897-901 (2004).

the equivalent of a typical 747 jumbo jet, filled to capacity with passengers, slamming into a mountainside once every two months. What if the air quality modeling were horribly wrong, and the number of air pollution fatalities were half the best estimate. Would Canada tolerate a frequency of one fully-loaded jumbo jet slamming into a mountainside three times a year? Would Canada tolerate the occurrence of a September 11 three times a year?

As the *Imperial Tobacco* case instructs us, a legislative act that creates a cause of action for a province such as Ontario to pursue a damages claim can create certain litigation advantages that the common law cannot. Specifying burdens of proof, forms of admissible evidence, and theories of liability that allow recovery against polluters that only contribute to part of the problem, all seem to be allowable features of this cause of action. While Canadian courts are bound to respect the "rule of law," evidently these features do not offend the Canadian Supreme Court's conception of the rule of law. And finally, *Imperial Tobacco* seems to indicate that the transboundary aspects of such a lawsuit would not likely be a bar to recovery, at least in this unilateral world that the United States has seemingly chosen to pursue.