

January 1982

On Living Together in North America: Canada, the United States and International Environmental Relations

John E. Carroll

Newell B. Mack

Follow this and additional works at: <https://digitalcommons.du.edu/djilp>

Recommended Citation

John E. Carroll & Newell B. Mack, On Living Together in North America: Canada, the United States and International Environmental Relations, 12 Denv. J. Int'l L. & Pol'y 35 (1982).

This Article is brought to you for free and open access by the University of Denver Sturm College of Law at Digital Commons @ DU. It has been accepted for inclusion in Denver Journal of International Law & Policy by an authorized editor of Digital Commons @ DU. For more information, please contact jennifer.cox@du.edu, digitalcommons@du.edu.

On Living Together in North America: Canada, the United States and International Environmental Relations

Keywords

States, Environmental Law, Pollution, Environmental Protection

On Living Together in North America: Canada, the United States and International Environmental Relations

JOHN E. CARROLL*
NEWELL B. MACK**

"If it works, don't fix it." This excellent advice no longer applies to the mechanisms used in resolving environmental disputes between Canada and the United States. Those mechanisms no longer work. They need to be "fixed." This paper contends that: (1) Canadian-U.S. environmental problems are currently resolved on an ad hoc basis; (2) the consequences of continuing this ad hoc approach are not attractive; (3) there are alternative ways to conduct Canadian-U.S. environmental relations; it is feasible (4) to choose an alternative approach and (5) to implement it.

I. THE PROBLEM: THE AD HOC APPROACH

Canada's relationship with the United States, from the late eighteenth and continuing into the nineteenth centuries, was marred by intermittent war and Canadian fear of annexation.¹ During the first three quarters of the twentieth century the relationship changed to one of close friendship and cooperation. Until recently this mutual respect had endured despite Canadian resentment of the elephant-and-mouse relationship resulting from the great disparity in the sizes of the two countries' populations, and Canadian concerns over preservation of its economic self-determination and separate identity.

In the 1970's, however, a new factor entered the relationship: trans-

*1982 by John E. Carroll and Newell B. Mack.

*John E. Carroll is Associate Professor of Environmental Conservation, University of New Hampshire. Ph.D., Resource Development, Michigan State University. Professor Carroll is the author of four books and numerous articles on Canada-U.S. environmental and energy relations. He is currently the Kellogg Foundation National Fellow working in international environmental relations.

**Newell B. Mack is a science policy researcher at the Energy and Environmental Policy Center, Jefferson Laboratory, Harvard University. Ph.C., University of Washington. He was formerly a Research Associate in the Program in International Environmental Issues at the Center for International Studies, M.I.T.

The authors acknowledge with thanks helpful discussions with Patrick Heffernan, Carla B. Johnston and Richard Wilson, and the support of a grant from the General Electric Foundation to Harvard University.

1. See J. S. DICKEY, *CANADA AND THE AMERICAN PRESENCE* (1975); G. LANCELOT, *CANADA AND THE AMERICAN REVOLUTION* (1967); J. BARTLETT BÉBNER, *THE NORTH AMERICAN TRIANGLE* (1966).

boundary environmental problems. Environmental disputes are inevitable between two nations which share a long boundary and large continental "commons": air masses, rivers, the Great Lakes, and three oceans. Past disputes, such as disagreements over the Skagit-High Ross Dam,² the Poplar power plant,³ and the Eastport oil refinery,⁴ have been relatively minor. Though still unresolved, these problems are now overshadowed by much more serious issues such as acid precipitation, toxics in the Great Lakes, and the environmental and fisheries ramifications of the development and transport of oil and gas found in the Arctic and offshore.⁵ Serious environmental problems now affect vast regions, major industries, hundreds of thousands of people, and significant sectors of the economies of both nations.⁶ These problems pose a greater threat to Canadian-U.S. relations than any other difficulties experienced in recent history.

In the past the two nations have handled environmental problems by reaching temporary accommodations; they have not agreed on rules of behavior. Their environmental relationship is thus founded on a series of ad hoc arrangements, in contrast with a problem-solving approach based upon commonly shared principles and guiding rules. This ad hoc approach is the key problem in the environmental relationship.

Admittedly, there have been some steps toward establishing principles to guide the relationship. (See Figure 1 below).

(Figure 1)

PAST	PRESENT	FUTURE ?	
Totally ad hoc	Largely ad hoc but Boundary Waters Treaty (BWT), Great Lakes Water Quality Agreement	BWT binding for air and water quality; covers all marine, Arctic	General environmental treaty

2. The Skagit-High Ross Dam is a large hydroelectric dam in the State of Washington which backs water into Canada in order to generate cheap electricity for Seattle. A current proposal calls for increasing the height of the dam (to generate additional electricity) thus further inundating Canadian acreage. J. CARROLL, *ENVIRONMENTAL DIPLOMACY: AN EXAMINATION AND PROSPECTIVE OF CANADIAN-U.S. ENVIRONMENTAL RELATIONS* (1982) (to be published in 1983 by University of Michigan Press.) [hereinafter cited as *ENVIRONMENTAL DIPLOMACY*].

3. The Poplar power plant is a partially completed electrical production facility located in Saskatchewan a few miles from the Montana border. It has water apportionment, water quality and air quality impacts on the State of Montana. *Id.*

4. The Eastport oil refinery issue concerns a U.S. proposal to build a large oil refinery, on the Maine-New Brunswick border, which would require large oil-carrying supertankers to pass through dangerous and disputed boundary waters. A very large Canadian fishery is threatened. *Id.*

5. For a comprehensive treatment of all the major transboundary environmental problems involving the United States and Canada, see *ENVIRONMENTAL DIPLOMACY*, note 2 *supra*.

6. See John Carroll's study of the role of acid rain in Canada-U.S. relations: J. CARROLL, *ACID RAIN: AN ISSUE IN CANADIAN-AMERICAN RELATIONS* (1982) (published by the National Planning Association, Washington, D.C.) [hereinafter cited as *ACID RAIN*].

The Treaty with Great Britain Relating to Boundary Waters Between the United States and Canada⁷ (Boundary Waters Treaty) does define "boundary waters"⁸ and establishes priorities for using certain of the boundary and near-boundary waters.⁹ It also specifies that the rights of the upstream nation may not be abridged so long as the downstream nation is not deprived of reasonable use of water.¹⁰ This philosophy was expressed in the Harmon Doctrine¹¹ and promoted by the U.S. team which negotiated the Treaty. Further, the Boundary Waters Treaty established the International Joint Commission (I.J.C. or Commission), which issues rule-making procedural orders.¹²

The Great Lakes Water Quality Agreements of 1972¹³ and 1978,¹⁴ while not establishing binding rules, do introduce principles guiding joint monitoring and research in the Great Lakes ecosystem, as well as goals for improving the Lakes' water quality and for allocating certain properties of the Great Lakes, such as sewage dilution.

Principles—but clearly not binding rules—emerged from negotiations on the Poplar power plant issue. These principles were reflected in the bilateral agreement to monitor jointly the air and water quality of the Poplar River.¹⁵ Other principles emerged from negotiations over the

7. Treaty with Great Britain Relating to Boundary Waters Between the United States and Canada, Jan. 11, 1909, United States-Great Britain, 36 Stat. 2448, T.S. No. 548 [hereinafter cited as Boundary Waters Treaty].

8. *Id.* preliminary art. Boundary waters are defined as those along which an international boundary runs. Also included are those waters which are upstream from and flow across the boundary, waters tributary to boundary waters, those waters which flow from boundary waters, and waters which are downstream from the boundary, having flowed across it.

9. *Id.* art. VIII.

10. *Id.* art. II.

11. Named after former Attorney General Judson Harmon, the Harmon Doctrine espouses the sovereignty of each state to do as it wills with water on its side of the border. In practice it favors the United States, which is more often than Canada the upstream nation on important transboundary rivers. For a detailed explanation of the Harmon Doctrine, see ENVIRONMENTAL DIPLOMACY, note 2 *supra*.

12. Boundary Waters Treaty, *supra* note 7, at arts. VII-X. The International Joint Commission [hereinafter cited as I.J.C.] was established by the Boundary Waters Treaty to adjudicate certain disputes over boundary waters apportionment and to make recommendations about other matters involving boundary waters and air when requested by the two federal governments. *Id.* art. VII.

13. Agreement on Great Lakes Water Quality, Apr. 15, 1972, United States-Canada, 23 U.S.T. 1301, T.I.A.S. No. 7312. This Agreement was an executive agreement to work jointly on monitoring and research of Great Lakes water pollution, and to make recommendations to both governments on needed action. The agreement was renewed in 1978.

14. Agreement on Great Lakes Water Quality, Nov. 22, 1978, United States-Canada, 30 U.S.T. 1383, T.I.A.S. No. 9257.

15. Ad hoc agreement, reached through an exchange of diplomatic notes, to establish a committee of federal, state and provincial representatives. The committee is to monitor the impact on air and water quality in Montana and Saskatchewan arising from the Poplar River power plant located in Saskatchewan. ENVIRONMENTAL DIPLOMACY, note 2 *supra*.

Cabin Creek-Flathead River coal mine dispute¹⁶ and were reflected in the formation of a bilateral committee for information exchange. Similar principles have been proposed for resolving other issues, such as those concerning Champlain-Richelieu flooding.¹⁷ However, except for certain very limited water apportionment provisions of the Boundary Waters Treaty, none of these agreements is binding. Both nations frequently ignore their spirit, if not their letter. Further, these agreements do not, by any reasonable definition of the term, establish rules for behavior. They merely temper the customary ad hoc approach.

The assertion that the current approach is to consider each case on an ad hoc basis is dramatically supported by the fact that there are virtually no institutions which deal with Canadian-U.S. environmental relations. Aside from the Departments of State and External Affairs, the entire bureaucracy consists of the I.J.C. The I.J.C. is composed of six Commissioners assisted by small staffs in Washington and Ottawa (totaling less than thirty-five people) and by the Great Lakes regional field staff in Windsor, Ontario, which is restricted to performing functions specified in the Great Lakes Water Quality Agreement.¹⁸ The only other apparent bureaucracies are in fact examples of informal "ad hockery" rather than formal institutionalization. These bureaucracies are the technical working groups created by the Memorandum of Intent on Transboundary Air Pollution (Memorandum of Intent),¹⁹ and the monitoring committees established to defuse a few of the border issues, notably the Poplar, Cabin Creek and the St. John River issues. None of these committees has any full-time or even part-time personnel of its own; the staffs are composed of individuals borrowed from federal, provincial and state agencies. The environmental relationship has not yet become sufficiently formalized to require permanent full-time institutional structures.

Satisfactory diplomatic settlement of disputes using the ad hoc approach has been achieved only in the few cases where water apportionment and priority of use, for which rule making is mandated in the Boundary Waters Treaty, were central issues. Examples of such disputes include those concerning Lake of the Woods,²⁰ Milk River or Sage Creek²¹

16. The Cabin Creek-Flathead issue involves a proposed British Columbia coal mine which would have an impact on the wilderness values of northwestern Montana and Glacier National Park. A bilateral committee for information exchange has been established to deal with this problem. *Id.*

17. The Champlain-Richelieu issue involves the flooding of the flat Richelieu River Valley of Quebec by the high waters of Vermont's Lake Champlain and the effort of Quebec to manipulate artificially the levels of those waters at some ecological cost to Vermont. *Id.*

18. INT'L JOINT COMM'N, 1978-79 Annual Report (Ottawa and Washington, D.C. 1979).

19. Memorandum of Intent on Transboundary Air Pollution, Aug. 5, 1980, United States-Canada, T.I.A.S. No. 9856. In the Memorandum, both federal governments pledged to act to stem the flow of air pollutants moving across the international border. Sulfur dioxide and nitrogen oxides, the precursors of acid rain, were the targets. The Memorandum also committed the two governments to negotiate a bilateral air quality agreement.

20. Lake of the Woods is a boundary water at the juncture of Minnesota, Ontario and Manitoba whose usage is managed under a 1912 bilateral agreement. INT'L JOINT COMM'N,

and the single case where forced arbitration was used: the *Trail Smelter Arbitration*.²² In addition, the Milk River decision, after many years of acceptance, now shows signs of coming apart.²³

The ad hoc approach has failed to resolve the Skagit-High Ross Dam dispute for over two decades and the Garrison irrigation dispute²⁴ for nearly a decade. It has prolonged by years the resolution of other bilateral environmental problems. Most of these issues will remain unresolved and others, such as the Dickey-Lincoln Dam issue, will be resolved only for domestic reasons,²⁵ or will be accepted as accomplished facts for which damage compensation claims will be made.

The ad hoc approach has, thus far, generally failed to resolve bilateral disputes. Yet these disputes have been minor compared with the transboundary environmental issues which are now developing. If small problems have not been satisfactorily handled through the ad hoc approach, one can hardly expect to resolve present and future disputes concerning toxic substances in the Great Lakes, or acid rain, by resorting to the ad hoc method. What would be the consequences of continuing to make ad hoc decisions when confronted with these far more serious challenges?

II. THE CONSEQUENCES OF CONTINUED AD HOC DECISION MAKING

Future decisions about the environment can be made in a number of ways. The two nations can continue to make ad hoc decisions, treating each issue without regard to any formalized "rules" for behavior. Or, they can agree to "rules" for future behavior, and base their decisions on those "rules." The authors use the word "rules" loosely, to include the entire spectrum from guidelines for procedure to formal procedures rigidly enforced.

This section discusses the consequences of continuing to make deci-

Docket 3R (Ottawa and Washington, D.C., 1912).

21. Milk River and Sage Creek are transboundary rivers along the Montana-Alberta border which have been the subject of apportionment disputes regarding irrigation usage. In 1946 the I.J.C. reached a decision on this issue. INT'L JOINT COMM'N, Docket 53R (Ottawa and Washington, D.C., 1946).

22. *Trail Smelter Arbitration* (United States v. Canada), 3 R. INT'L ARB. AWARDS 1905 (1949); *reprinted in* 35 AM J. INT'L L. 684 (1941).

23. Earlier I.J.C. apportionment decisions may be threatened by local pressure from irrigators in Alberta on the Alberta Government to construct a new dam in the area in reaction to increasing Montana irrigation demand.

24. Garrison is a controversial irrigation project in North Dakota which would seriously impact water quality and commercial fisheries in Manitoba. See J. CARROLL & R. LOGAN, *THE GARRISON DIVERSION UNIT: A CASE STUDY IN CANADIAN-U.S. ENVIRONMENTAL RELATIONS* (published by the C.D. Howe Research Institute, Montreal and the National Planning Ass'n, Washington, D.C., 1980).

25. Dickey-Lincoln was a proposed hydroelectric dam in northern Maine which would have flooded valuable forest land in Quebec. The project has been blocked by the U.S. Congress. See ENVIRONMENTAL DIPLOMACY, note 2 *supra*.

sions in the absence of rules. The next section discusses the consequences of decision making based on rules, and compares some of the results of these two very different decision-making methods.

Any decision has consequences for several groups of people who enjoy—or suffer—its outcome. In Canadian-U.S. environmental decisions these groups are commonly industries, governments, and “environmentalists”—those citizens concerned more with environmental consequences than with immediate economic consequences. The political energies of these groups are channeled through the media and finally come to bear on officials representing the several levels of government—notably diplomats responsible only to the two federal governments.

The diplomats face a four-tier dilemma in attempting to resolve an issue. First, the actors may not agree on what criteria—for example economic, political or environmental criteria—are to be used to assess the consequences of a decision (Table I).

Table I

A Few of the Criteria for Resolving a
Transboundary Environmental Issue

Are all the benefits and costs counted: health, environmental, economic, etc.?

Do the total benefits exceed the total costs?

Are the costs and benefits justly distributed among those affected by the decision?

Does the decision contribute to the predictability of future decisions?

Can the decision, once reached, be administered?

Is the decision politically acceptable to the major actors?

Second, even if the actors agree on assessment criteria, they may disagree over which raw data to assess. A classic example of this is the disagreement between scientists employed by coal-fired power plants and scientists representing environmental groups over the effects of acid rain. Third, even if all sides agree on the scientific data, each may weigh the data very differently. The aesthetic and monetary value of an oil-fouled duck is measured differently by the worker who drilled for the oil, the utility whose tanker spilled the oil, the environmentalist who cleansed the bird, and the consumer who pays for the oil. Fourth, even if none of the above problems arises in a dispute, the disagreement is not resolved solely on its merits, in isolation from other factors. The decision is influenced by the larger political and economic context within which a single issue is decided.

The ad hoc approach, it must be admitted, has some advantages. It provides flexibility for diplomats, enabling them to respond to changes in

political leadership and policy direction at all levels of government. It also permits the diplomatic practice of issue "linkage," though diplomats often deny that they use this practice.²⁶

The advantages of the ad hoc approach are overshadowed by its costs. Perhaps the greatest cost in using this approach is a loss of predictability. "Ad hockery" provides no certainty as to how an issue will be handled in the future. Each issue is disposed of separately, often in a heated and emotional atmosphere generated by the media. All interested parties can exert pressure and influence for any purpose and issues are resolved in ways which achieve narrow ends without weighing broader considerations. The cost of not resolving disputes under agreed-upon rules is the loss of a predictable, orderly resolution acceptable to the majority of those involved. Under an ad hoc approach, each party to the dispute is a potential loser. Businesses suffer the increased cost of unpredictability, an economic threat to their long-term investments. Local governments find it more difficult to protect long-term property values. Environmentalists lose the chance to develop rules and regulations which might protect the environment in future disputes. Additionally, the citizens of both nations suffer the costs of worsened diplomatic relations, for foreign relations failures are foreign relations costs, even if rarely measured in the calculus of cost-benefit ratios.

In the present state of Canadian-U.S. environmental relations, the value of "ad hockery" and its inherent flexibility may well have run its course. The consequences of continuing the present ad hoc approach are not desirable. The two nations may well have more to gain by adopting a more structurally ordered system.

III. ALTERNATIVES AND THEIR CONSEQUENCES

Canadians and Americans need not suffer the consequences of ad hoc accommodations. They can instead adopt alternative methods of dealing with transboundary environmental issues. In brief, they can agree upon rules of conduct. A few options for those rules, and for the agreement, follow. Rules governing the "input" to the decision-making process—what environmental issues will be considered and when—and the "output" of the process—studies or recommendations or enforced decisions—are considered first. Then possible forms for the agreement—memorandum of understanding, treaty, etc.—are examined.

A matrix of alternative agreements on rules of behavior is shown in Figure 2. The rules agreed upon by the two nations are shown in the horizontal rows of Figure 2. Several options for the form of the agreement establishing those rules appear in the vertical columns. A single form of agreement—equivalent to choosing a single vertical column in Figure 2—is not necessary. There could be, for example, a treaty on monitoring

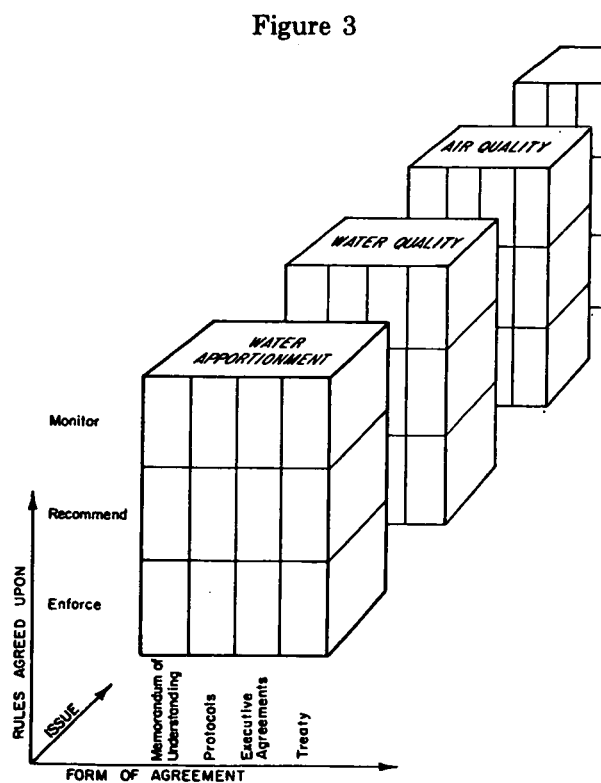
26. Issue linkage is the deliberate conditioning, by diplomats, of progress on one issue in return for progress on another (perhaps unrelated) issue.

and a memorandum of understanding on enforcement (heavy rectangles in Figure 2). The rules and agreements of Figure 2 might apply primarily to one aspect of the environment, as in the Great Lakes Water Quality Agreement, or to several aspects. Figure 2 can thus be thought of as a two-dimensional slice through a three-dimensional cube—much as many slices of bread make up a loaf. (Figure 3).

Figure 2

A. RULES AGREED UPON		B. FORM OF AGREEMENT		AGREEMENT			
		NO AGREEMENT ("ad hoc")	Memorandum of Understanding	Protocols	Executive Agreements	Treaty	
A1. INPUT ISSUE	What issues						
	When considered						
A2. OUTPUT ACTION	Monitor						
	Recommend						
	Enforce						

Figure 3



A. *Rules Agreed Upon*

1. *Input*

What issues will be considered, when, under the agreement? Virtually all transboundary environmental issues can be the subject of an agreement because at present there are almost no mandatory rules to guide their resolution. The quantitative apportionment of water is one exception, for it is governed by the Boundary Waters Treaty.²⁷ But there are no mandatory rules covering water quality or air quality. Other issues have received little or no attention: groundwater, soil contamination, acid rain and projects with "long distance" impacts that arise at points in one nation far from its border and have effects deep within the other nation. Such issues obviously could be dealt with in any agreement.

When should a development with transboundary impact be considered as an "issue?" Whatever the form of agreement, it must specify a "trigger" indicating when the issue has become sufficiently important to warrant attention. This question of timing is addressed in the Boundary Waters Treaty. Before a party can use boundary waters it must file an application with the I.J.C. The filing of the application sets certain procedures in motion. If a party from one nation should violate the treaty by attempting to appropriate boundary waters without filing an application, the other nation can insist that an application be filed, thus triggering the procedural response and so bringing agreed upon rules into play.²⁸

What degree of environmental damage should trigger action? For some environmental issues no answer is found in the federal law of either nation, nor in state or provincial law. For other issues answers are found in the laws of some or all of the four jurisdictions. Unfortunately, the answers differ. Should violation of the law of only one jurisdiction trigger action, or should more—perhaps all four laws—be violated before the mechanism is triggered? An answer may gradually emerge as the governments adopt increasingly uniform standards.

2. *Output*

Once an issue has been taken up by a decision-making mechanism, what rules govern the Canadian-U.S. response? Does the mechanism merely monitor the problem, or make recommendations on how to deal with it, or does it have authority to enforce its recommendations? Merely to illustrate various degrees of authority for implementing action, three options are considered: joint monitoring, research and reporting only; advice and recommendations; and enforcement.

Joint monitoring, research and reporting are essential. Gathering data which both nations agree are reliable is a major step toward resolv-

27. Boundary Waters Treaty, *supra* note 7, at art. VIII.

28. *Id.*

ing bilateral problems. Reaching accord on the interpretation of the data is more difficult. Agreement on the data and their interpretation is more likely if monitoring and research are carried out jointly by the two nations. Scientific cooperation is the easiest type of joint effort to achieve; its importance is much more than symbolic. It is in this area that the I.J.C. has achieved an admirable record over many years.²⁹ Whether or not the two nations choose to move beyond this level, they must at least work to achieve accord on scientific facts and their interpretation.

Formulation of advice and recommendations carries the process a step further. The I.J.C. has reached the stage of making recommendations, but there are limits to what the I.J.C. can do. As the U.S. State Department and the Canadian Ministry of External Affairs control the flow of work to the Commission,³⁰ they can easily prevent the Commission from making recommendations on controversial matters. If a recommendation which differs from diplomatic views is made public it can threaten diplomatic maneuvering because the diplomats must then oppose the advice of an independent body. There is clearly a range of choices as to how broadly recommendations should be publicized.

Enforcement can be carried out under binding authority which is limited or broad. The I.J.C. exerts limited binding authority, although on a very restricted basis. The question hindering any agreement will be: How "limited" is this authority? The precise breadth of this limited binding authority will determine how easy it will be to achieve agreement. The option of broad binding authority is more difficult to achieve, but more effective than weaker options. An extreme example of the use of broad binding authority is a high arbitral tribunal composed of three or five distinguished citizens of the two countries who would carefully weigh each issue and whose findings could not be appealed. The impossibility of appeal would ensure termination and, by definition, bilateral resolution of the issue—though not necessarily the satisfaction of all parties involved in the judgment.

There clearly are numerous options for rules the two nations could follow in order to predict each other's behavior and to avert or resolve transboundary conflicts (horizontal rows in Figure 2). There are also numerous options for a formal agreement establishing these rules (vertical columns in Figure 2).

B. *The Form of Agreement*

Four possible vehicles for codifying rules of conduct, each involving a different degree of stringency, are: (1) a memorandum of understanding; (2) protocols to the existing Boundary Waters Treaty; (3) an executive agreement; and (4) a treaty.

29. ENVIRONMENTAL DIPLOMACY, note 2 *supra*.

30. *Id.*

A memorandum of understanding has symbolic benefits, but it is very weak and in the past has not really influenced behavior. The Canadian-U.S. Memorandum of Intent concerning the long-range cross-border transport of air pollutants is a case in point: it influenced behavior in Canada but was largely ignored in the United States.³¹ The Michigan-Ontario Memorandum of Understanding on Air Pollution, signed about a decade ago, has also proven ineffective.³² The symbolic value of these gestures is real, but may not be followed by concrete action.

The alternative of writing protocols to the existing Boundary Waters Treaty could conceivably have the reverse outcome: action without symbolism. Such protocols would probably not be highly publicized, and so would lack symbolic value, but could produce genuinely effective action. This alternative deserves study because quiet action is needed, similar to the diplomacy practiced by outstanding Canadian and American diplomats of the 1950's and 1960's such as Arnold Heenev and Livingston Merchant.³³

An executive agreement has value but must not be overrated. Despite all the attention given to the two Great Lakes Water Quality Agreements, there is little in them that is binding.³⁴ They have had mixed results, and are often threatened with crisis as during the Nixon impoundment of appropriated funds of a decade ago, or today's severe Reagan Administration budget cuts.³⁵ The spirit in which the letter of these agreements has been administered leaves much to be desired. It is questionable whether an executive agreement can produce rules for, and garner the support of, all the border states and provinces and the legislative and executive branches of both federal governments.

The treaty approach presents the greatest challenge and promises the greatest reward. The approval of a treaty is a long and involved process. Public awareness can be generated by the national debate which precedes

31. ACID RAIN, note 6 *supra*.

32. The Michigan-Ontario Memorandum of Understanding on Air Pollution was an agreement between the state and the province to seek reduction in air pollutants crossing the border. It was focused on the Detroit-Windsor area. Neither the memorandum nor the I.J.C. study concerning Detroit-Windsor and Sarnia-Port Huron transborder air pollution is binding. Given the very high economic stakes, there has been little incentive for them to be anything but symbolic. ENVIRONMENTAL DIPLOMACY, note 2 *supra*.

33. Arnold Heenev was Canadian Ambassador to the United States on two occasions in the 1940's and 1950's. He was also Canadian Chairman of the I.J.C. Livingston Merchant was a career U.S. diplomat who saw a number of Canadian assignments.

34. The Great Lakes Water Quality Agreements are executive agreements rather than treaties and are not enforceable. Their success depends on goodwill. ENVIRONMENTAL DIPLOMACY, note 2 *supra*.

35. The effects of the Nixon Administration impoundment of congressionally appropriated dollars destined for Great Lakes pollution cleanup, and the Reagan Administration reduction of the Environmental Protection Agency's budget, are so substantial as to cast doubt on the willingness of the United States to honor its commitment to Canada under the Great Lakes Water Quality Agreements of 1972 and 1978, and perhaps also under the Memorandum of Intent.

a treaty's ratification. The rigor of a treaty can assure the cooperation of all levels of government.

These options for rules and agreements generate a broad range of alternatives to the current ad hoc style of decision making. Each option, if adopted, would yield a different set of consequences. The question is whether the two nations will adopt one of these alternatives—and thus its consequences—or instead maintain the status quo.

IV. RECOMMENDATIONS: A TRIBUNAL ON TRIAL

The choice which faces Canada and the United States is one between the perpetuation of ad hoc decision making, or the adoption of some other method of managing transboundary environmental problems. For the moment the two nations have not yet made that choice and so continue to feel the consequences of ad hoc decisions. If another method is adopted it will probably be chosen only because—and when—it becomes politically more expensive to maintain the status quo than to shift to a different way of handling disputes. In particular, no shift will be made until the constituencies who have a stake in transboundary matters—namely corporations, environmentalists, government officials of towns near the border, etc.—feel an impact and as a result start to press for a change. This birth of political will, should it occur, will be one consequence of maintaining the status quo. Other results of continuing to make ad hoc decisions have been discussed in section II.

The constituency, such as environmentalists, which first presses for change will seek that alternative to “ad hockery” which best suits its interests. The search will provoke reactions from other constituencies, such as corporations which, dissatisfied with the environmentalists' proposal, will propose an alternative more cordial to their own corporate interests. The debate will then no longer be over whether to continue ad hoc decision making or to agree to rules. Rather, it will be over whose rules will be selected. Views will differ on which environmental issues should be considered and when, and on what rules should govern the joint Canadian-U.S. response. Theoretically, the choices could be based on abstract and tidy criteria for deciding transboundary issues (Table I). In fact, the decision will likely be the outcome of a political tug-of-war, with each constituency using those criteria which advance its case.

The need to deal with environmental problems in a politically realistic context suggests the desirability of an instrument with binding authority in some carefully defined areas, but which also recognizes other areas where action would consist merely of advice and recommendations. (Table II).

Table II
Simplified Summary of Shifts of Functions From National Toward
 International Jurisdiction

ARRANGEMENT FUNCTION	Unilateral (all levels of govern- ment)	Informal Cooperation		Bilateral Federal/ Federal Agreement
		Federal/ Federal	Federal/State Provincial	
<u>"Early Warning"</u>				
research	0	0 [1]	—————→	X
monitoring for research	0	0	————— 0 [2] —————→	X
data base & analysis	0	0	—————→	X
prior notice	0	0		X
<u>"Assessment"</u>				
consultation		0	—————→	X
impact assessment	0		—————→	X
<u>"Enforcement"</u>				
standard setting	0			
monitoring for enforcement	0			
enforcement	0			
conflict resolution	0			

Legend 0 = existing
 X = proposed
 1 = IJC included under Federal-Federal Cooperation (and
 not Treaty column)
 2 = Michigan-Ontario Transboundary Air Pollution
 Committee

Source: H. SEIGMANN, RESPONSES TO TRANSFRONTIER AIR POLLUTION:
 THE CANADIAN-U.S. CASE (Program on Int'l Envtl. Issues,
 Center for Int'l Studies, Publication C/79-13, M.I.T., Nov.
 1979).

With experience gathered over time, a satisfactory balance between authority and advice could eventually be reached. Ideally, however, the area of binding authority should be broader than the very narrow authority presently granted to the I.J.C.³⁶

Given the numerous options, and the complex political forces which will generate the actual outcome, any recommendation is quite arbitrary. Nevertheless, the authors propose an experiment with the concept of broad binding authority: an arbitral tribunal should be established for a trial period of perhaps ten years. At the end of that time, the tribunal would be evaluated and then abolished or permanently or temporarily renewed. Such a tribunal could be established by executive agreement. Efforts toward treaty formulation should begin simultaneously, with implementation of a treaty by the end of the ten-year period as the goal. This trial period would allow sufficient time for approval of the treaty, including ratification by the U.S. Senate. An experiment seems desirable because political realities currently prevent a long-term commitment to formulation of a tribunal. The precise characteristics of a tribunal are less important than the fact—and this is the point to stress—that such a tribunal would be an experiment.

Let us examine the tribunal concept following the outline of Figure 2. The tribunal could consider any environmental issue when raised by either federal government.³⁷ It would enforce its decisions through broad binding authority. Its decisions could not be appealed. At the end of the trial period, or after one or more renewals of the trial period, the tribunal would be established by treaty.

The three or five members of the tribunal would be distinguished citizens appointed by each country's executive branch and approved by its legislature. They would serve for a single term of long and fixed duration, perhaps one or two decades, and on retirement would receive a generous lifetime pension. The long fixed term and large pension would serve to provide some of the same independence and protection from the buffeting of political winds that is enjoyed by United States Supreme Court Justices.

Many of the other options have been tried, and each has had shortcomings. If Canadians and Americans wish to resolve environmental conflicts, they may be willing to experiment with a method which appears to offer great long-term benefits, despite the challenges to be overcome. Should the attempt not succeed, it would automatically terminate after a specified period of time. Should the tribunal be abolished, the two nations would be no worse off and would have made a good faith effort.

36. The authority of the I.J.C. is narrow; it is limited only to apportionment of boundary waters under a restricted set of circumstances. ENVIRONMENTAL DIPLOMACY, note 2 *supra*.

37. The letter of the Boundary Waters Treaty currently allows either country to send a reference to the I.J.C. In practice, references come from both countries simultaneously.

Regardless of its outcome, the experiment would benefit both peoples.

V. IMPLEMENTATION: BUILDING THE CONSTITUENCY

Implementation of the tribunal experiment can be sought through an age-old technique: linking a goal with the self-interests of those people who have the power to achieve it. This method entails identifying those who have the power to accomplish a goal, and then demonstrating how, by achieving it, they can advance their self-interests.

The constituencies with the most to gain from a tribunal are the corporate community, the citizen environmentalist community, and local governments near the national borders. Corporations make long-term investments, and thus gain from steps which reduce uncertainty about the future. Even disadvantageous regulations, if they can be guaranteed not to change for a decade or so, may be preferred to a shifting regulatory climate in which today's investment in pollution control becomes tomorrow's wasted effort. This is especially true in the management of long-term, large-scale endeavors, such as large energy projects. Citizen environmentalists benefit from rules for environmental protection which give environmentalists the legal recourse they now lack. Local officials of towns near the Canada-U.S. border obviously need to respond to the interests of the residents of their towns and to protect their towns' long-term investments and credit ratings. Established rules would permit long-term planning for such local public concerns as groundwater protection, pollution control and waste disposal.

These groups could take a concrete step toward forming a tribunal, or some other mechanism for dispute resolution, by meeting periodically to seek points of intersection between their interests and the goal of improved environmental relations. An informal group of industrialists, government officials and environmentalists might well be able to formulate the outlines of a bilateral agreement more easily than could diplomats. After a framework had been devised, attempts could be made to consult with, and seek the support of, a broader constituency. Eventually one would hope to gain the support of legislative committees such as the U.S. Senate's committees on Foreign Relations and on Environment and Public Works. Resolutions of support from either or both houses of the U.S. Congress would be valuable. Resolutions by state legislatures, with resultant pressure on U.S. senators, should also ease the way toward Senate ratification of a treaty. Only the willingness of the national governments to support such a tribunal, preferably with the support of provincial and state governments, could bring it into being.

The rules may be opposed by people who fear that they will lose profits, flexibility or power. Perhaps opponents will come to accept the view that improvement in bilateral relations not only reduces uncertainty but produces other benefits, including opportunities for the two nations to work jointly in areas such as energy, economic development, and environmental research.

Environmental relations within the North American community can improve. Decisions about transboundary environmental issues need not be ad hoc but can instead follow guidelines agreed to by both nations, with disputes resolved by a mechanism such as a tribunal. The values necessary for agreement exist. What has been lacking has been the will.