Case Study of Transboundary Dispute Resolution: Canada and the United States of America
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1. Case summary

River basin: All transboundary waters along the U.S.-Canada boundary (Figure 1 and table 1)
Dates of negotiation: 1905 to 1909
Relevant parties: Canada (originally negotiating through UK), United States
Flashpoint: Water quality concerns of early twentieth century
Issues: Stated objectives: to provide an institutional framework to deal with issues related to boundary waters
Additional issues: Water-related: water quality issues were re-emphasized in 1978; Non-water: 1987 Protocol and 1991 Agreement added air pollution
Excluded issues: Tributaries to transboundary waters; some sovereignty issues
Criteria for water allocations: "Equal and similar rights"
Incentives/linkage: None
Breakthroughs: Canada accepted sovereignty argument; U.S. accepted arbitration function
Status: Over 130 disputes have been averted or reconciled

Figure 1: Map of all transboundary waters along the Canada-U.S. border (TFDD, 2007)
Table 1: Features of watersheds shared between the U.S. and Canada.

<table>
<thead>
<tr>
<th>Name</th>
<th>Riparian states (With % of national available water being utilized) b&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Riparian relations (with dates of most recent agreements)</th>
<th>Average annual flow (km&lt;sup&gt;3&lt;/sup&gt;/yr.)&lt;sup&gt;c&lt;/sup&gt;</th>
<th>Size (km&lt;sup&gt;2&lt;/sup&gt;)</th>
<th>Climate</th>
<th>Special features</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Joint Commission (Great Lakes)</td>
<td>Canada (1.4), United States (21.7)</td>
<td>Warm</td>
<td>22,5001</td>
<td>509,200</td>
<td>Humid</td>
<td>Cases of small number of riparians with good relations</td>
</tr>
</tbody>
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<sup>a</sup> Values for lakes under "Annual Flow" are for storage volumes.
<sup>b</sup> Source: Kulshreshtha (1993)
2. **Background**
Canada and the United States share a 4,000 mile boundary between the main portions of their States, and an additional 1,500 miles between the Canadian Northwest Territories and Alaska. Crossing these boundaries are some of the richest waterways in the world, not least of which are the vast water resources of the five Great Lakes. The *ad hoc* commissions, which until then had been established to resolve waterrelated issues were not sufficient to handle the growing issues. Even the International Waterways Commission, established in 1905, only dealt with issues on a case-by-case basis.

3. **The problem**
Canada and the United States share one of the longest boundaries in the world. Industrial development in both countries, which in the humid eastern border region relied on water resources primarily for waste disposal, had led to decreasing water quality along their shared border to the point where, by the early years of the twentieth century, it was in the interest of both countries to seriously address the matter. Prior to 1905, only *ad hoc* commissions had been established to deal with issues relating to shared water resources as they arose. Both States considered it within their interests to establish a more-permanent body for the joint management of their shared water resources.

4. **Attempts at conflict management**
As Canada and the United States entered into negotiations to establish a permanent body to replace the International Waterways Commission, both countries entered talks with their own interests mind. For the United States, the overriding issue was sovereignty. While it was interested in the practical necessity of an agreement to manage transboundary waters, it did not want to relinquish political independence in the process. This concern was expressed by United States position that absolute territorial sovereignty be retained by each state for the waters within its territory—tributaries should not be included in the Commission’s authority. The new body might retain some of the *ad hoc* nature of prior bodies, so as not to acquire undue authority. Canada was interested in establishing an egalitarian relation with the United States. It was hampered not only because of the relative size and level of development of the two states at the time, but also because Canadian foreign policy was still the purview of the United Kingdom—negotiations had to be carried out between Ottawa, Washington, and London. Canada wanted a comprehensive agreement, which would include tributaries, and a Commission with greater authority than the bodies of the past.

5. **Outcome**
The "Treaty Relating to Boundary Waters between the United States and Canada," signed between the United Kingdom and the United States in 1909, reflects the interests of each negotiating body. The Treaty establishes the International Joint Commission with six commissioners, three appointed by the governments of each State. Canada accepted U.S. sovereignty concerns to some extent—tributary waters are excluded. The United States in turn accepted the arbitration function of the Commission and allowed it greater authority than it would have liked.

The Treaty calls for open and free navigation along boundary waters, allowing Canadian transportation also on Lake Michigan, the only one of the Great Lakes not defined as boundary water. Although it allows each State unilateral control over all of the waters within its territory, the Treaty does provide for redress by anyone affected downstream. Furthermore, the Commission has "quasi-judicial" authority: any project which would affect the "natural" flow of boundary waters has to be approved by both governments. Although the Commission has the mandate to arbitrate agreements, it has never been called to do so. The Commission also has investigative authority—it may have development projects submitted for approval, or be asked to investigate an issue by one or another of the governments. Commissioners act...
independently, not as representatives of their respective governments.

Water quality has been a focal concern of the Commission, particularly in the waterways of the Great Lakes. The Great Lakes-St. Lawrence River system contains one-fifth of the world's surface fresh water and includes the industrial lifelines of each State. Perhaps as a consequence, the antipollution provisions of the Treaty met little opposition on either side. A 1972 "Great Lakes Water Quality Agreement" calls for the States both to control pollution and to clean up waste waters from municipal and industrial sources. This led to the signing of a new Agreement in 1978, and a comprehensive Protocol in 1987, each of which expanded the Commission's authorities and activities with respect to water quality.

These agreements define specific water quality objectives—the 1987 Protocol called on the Commission to review "Remedial Action Plans," prepared by governments and communities, in 43 "Areas of Concern"—yet allow the appropriate level of government of each side to develop its own plan to meet the objectives. The 1987 Protocol implemented an "eco-system" approach to pollution control, and called for the development of "lake wide management plans" to combat some critical pollutants. It also included new emphasis on non-point source pollution, groundwater contamination, contaminated sediment, and airborne toxics. In 1991, the two States signed an "Agreement of Air Quality" under which the Commission was given limited authority over joint air resources.

The International Joint Commission has met some criticism over the years; most recently some have questioned whether the limited authority of the Commission—politically necessary when the Commission was established—is really conducive to the "eco-system" approach called for in the 1987 Protocol, or whether greater supra-legal powers are necessary. Others have questioned the commitment of the Commission to the process of public participation. Nevertheless, given the vast amount of water resources under its authority, and the myriad layers of government to which it must be responsible, the Commission stands out as an institution which has effectively and peacefully managed the boundary waters of two nations over some ninety years, reconciling or averting more than 130 disputes in the process.

6. Lessons learned

- Even with an established bi-national management organization with significant experience can have difficulty with certain initiatives.
  After talks about pollution controlled failed in 1920, over fifty years went by when the issue was addressed again before creating the Great Lakes Water Quality Agreement in 1972. Both countries had anti-pollution programs domestically, but an international agreement proved complicated to work out even though relations were good between the two States.

- An international agreement can bring together a community to work together for greater ends.
  Since the inception of the 1909 Boundary Waters Treaty, Canada and the United States, and all stakeholders within the Great Lakes Basin, have worked together and have been brought together as a community as a result of the commitment in preserving the shared waters of the two countries.

7. Creative outcomes resulting from resolution process

A mutual acceptance of the difference in political and cultural systems between the two countries has transcended the gap into allowing the International Joint Commission to arrive at mutually beneficial agreements where this may be an impediment to similar situations elsewhere.

Flexibility within the agreement permits the IJC to adapt to new situations as a result of new information and a change in circumstances. As technology, politics and knowledge of the shared waters changes, the IJC is better prepared than if it were not able to adjust thereby making it an organization with periodic development.
8. **Timeline**

- 1912 First meeting of the IJC.
- 1918 IJC reports on the terrible pollution conditions within the Great Lakes.
- 1919 Canada and United States ask IJC to create legislation to address the pollution problem.
- 1920 Canada expresses interest in a treaty to control pollution, but United States declines. Topic left unaddressed.
- 1972 Canada and the United States sign Great Lakes Water Quality Agreement.
- 1978 Canada and the United States sign New Great Lakes Water Quality Agreement building on experience that was gained from under the previous Agreement with respect to water quality and pollution.
- 1987 The two nations sign the Great Lakes Water Quality Agreement Protocol in which more importance was placed on ecosystem well being.

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1 Dworsky and Allee, 1997
References


