Devils Lake Outlet and the Need for Canada and the United States to Pursue a New Bilateral Understanding in the Management of Transboundary Waters

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I. INTRODUCTION

The image of Canada is based on pure and plentiful water. White snow, eternal glaciers, running rivers, and vast lakes are part of the idea the world has about this nation. Few things are more threatening to this picture than polluting national waterways, but now Canadians are also afraid of contaminated water coming from their southern neighbour, the United States. Devils Lake is a closed basin of water located in north-east North Dakota. In recent years water levels have risen, creating frequent flooding with grave damage for farmland, homes, and businesses. The only way to face the emergency seems to be draining excess water into a watercourse. The Government of North Dakota decided to build an outlet that emptied into the Sheyenne River, just fifteen miles south of the lake. The Sheyenne River merges into the Red River, which flows north, crosses the border into Canada and empties into Lake Winnipeg. The decision to build this outlet created a lot of concern among people living in Manitoba who worried about the quality of their water.

The controversy might appear, at first glance, to be a simple dispute involving North Dakotan farmers and landowners on one side, and Manitobans, and in general Canadians, with an interest in protecting the quality of their lakes and rivers on the other side. As Devils Lake spreads, so does its capacity to affect the diplomatic relationship between Manitoba and North Dakota, and by extension Canada and the United States. This dispute could have a negative impact on the development of environmental protection measures at an international level. Behaviour of important neighbouring nations like the United States and Canada, which have enjoyed a long history of fruitful cooperation on environmental issues, will have important consequences for the international community and for the way nations negotiate the use of shared natural resources and the protection of these resources.

II. THE HISTORY OF DEVILS LAKE OUTLET

Devils Lake is a lake with no natural outlet and is part of the Hudson Bay basin. The water level of the lake is closely connected to weather conditions. During periods of copious precipitation, water levels rise, and naturally decrease through evaporation and diminish significantly during dry periods.[1] In recent years, Devils Lake has been the subject of a dispute regarding an outlet built to control its water level, which drains excess water into the Sheyenne River. Between 1993 and 1999, significant precipitation caused the elevation of Devils Lake to rise approximately 25 feet.[2] During this period the lake doubled its size and caused frequent and devastating flooding, including the inundation of over 80 000 acres of land.[3] The United States federal government, as well as North Dakota authorities, spent over $350 million in emergency funding to combat the flooding.[4]

In 1997, to prevent the frequent flooding caused by fluctuation of the lake's water level, Congress directed the United States Army Corps of Engineers ("Corps") to plan a project and to prepare an associated Environmental Impact Statement for an emergency outlet from Devils Lake to the Sheyenne River.[5] The Sheyenne River was chosen because of its proximity to Devils Lake, which is only fifteen miles north of the river bed.[6] Devils Lake and the Sheyenne River are both geographically part of the Hudson Bay Basin and this choice would not involve the inter-basin transfer of water. Devils Lake water would naturally flow from the lake overland to Sump Lake and then to the Sheyenne River when it reaches an elevation of 1 459 feet above sea level. However, the last natural spill is estimated to have happened 800 to 1 200 years ago.[7]

The Corps final report and EIS are dated April 2003. Among several alternatives, the Corps proposed the construction of an outlet in the area of Pelican Lake, with a maximum discharge capacity of 300 cubic feet per second of water. In addition, the Corps recommended that the outlet be operated seven

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1 U.S. Army Corps of Engineers, *Final Devils Lake, North Dakota Integrated Planning Report and Environmental Impact Statement* (St. Paul: U.S. Army Corps of Engineers, 2003), vol 1, S-4 [EIS].

2 *Ibid* at I-1. The record elevation of 1,448.33 msl was recorded in July 2001.

3 *Ibid* at S-4.

4 *Ibid* at S-1.

5 *Ibid*, see Abstract.

6 *People to Save the Sheyenne River, Inc. v North Dakota Department of Health*, 2005 ND 104, 697 N.W. 2d 319 at 323 (N. Dak. Sup. Ct. 2005) [*People to Save the Sheyenne River, 2005*].

7 United States, Federal Emergency Management Agency, *Final Programmatic Environmental Assessment: Devils Lake Region, North Dakota* (Denver: Department of Homeland Security, 2006) at 1.

months per year, from May to November.[8] This proposal was subject to several conditions, including the assurance of the Secretary of State that the outlet would not violate the *Boundary Waters Treaty*[9] and North Dakota's compliance with the *Clean Water Act* regulations.[10]

The Corps project was estimated at a cost of $186.5 million. Under the Corps cost sharing schedule, North Dakota's share would have been approximately $70 million.[11] Although the estimated cost was high, this project seemed to have the smallest environmental impact of the alternatives analysed.[12] The EIS required the construction of a sand filter to prevent the transfer of invasive species. It also included monitoring the Sheyenne River's water condition before opening the outlet and comparing information gathered in association with the operation of the outlet.[13]

The proposed outlet was never constructed. North Dakota officials did not agree with the provisions of the Corps project concerning water quality and biota transfer, as well as the state's share for the cost of the outlet.[14] The North Dakota Legislature asked the North Dakota Water Commission to prepare a study in order to plan the construction of an outlet relying entirely on state funds.[15] The Water Commission required and obtained a North Dakota Pollutant Discharge Elimination System ("NDPDES") permit from the North Dakota Department of Health ("NDDH").[16] This new project also planned to discharge excess water from Devils Lake to the Sheyenne River, but at a rate of 100 cubic feet per second and with a remarkable difference in construction and operation costs. The state's project cost was initially estimated to be around 28 million dollars, not even 15% of the cost of the Corps project.[17] The difference came from the decision not to include many of the environmental protection features adopted

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8 EIS, *supra* note 1 at S-2.

9 *Treaty Relating to Boundary Waters and Questions Arising with Canada*, United States and United Kingdom, 11 January 1909, 36 US Stat 2448, UKTS 1910 No 23 [*Boundary Waters Treaty* or *Treaty*].

10 EIS, *supra* note 1 at S-1.

11 *Status Report on the Activities of the International Red River Board* (International Red River Board, 2004) at 5.

12 For an evaluation of the alternatives, see EIS, *supra* note 1 at 5–53.

13 *Ibid*, see Abstract.

14 *Supra* note 11 at 5.

15 *People to Save Sheyenne River, 2005*, *supra* note 6 at 323.

16 *Ibid.*

17 *Supra* note 11 at 6.

in the previous project, in particular the sand filter designed to limit the risk of invasive biota transfer.[18]

North Dakota's actions raised several concerns, especially on the other side of the border in Manitoba. The Sheyenne River is a tributary of the Red River, which crosses the border and empties into Lake Winnipeg. Many interests lay in the Canadian part of the Hudson Bay drainage basin. Lake Winnipeg is the tenth largest freshwater lake in the world and it supports an important commercial fishing industry. This industry is directly worth over $15 million Canadian and involves First Nation communities.[19] In addition, fresh waters in Manitoba are important sport fishing destinations and the Red River represents nearly 20% of the total value of this industry to the province.[20]

Manitoba opposed the Devils Lake outlet proposals, because of the negative impact this kind of water diversion would have on the province's waters and ecosystems. The water quality of Devils Lake is lower than the water quality of the Red River, since it contains a high level of total dissolved solids, sulphates, and high salt.[21] In addition, the long isolation of Devils Lake from the rest of the Hudson Bay drainage basin resulted in the diversification of the biota existing in its waters. Invasive species represent a real threat when they come in contact with a new ecosystem and controlling their spread and effects can be almost impossible and expensive.

Manitoba, together with several groups opposing the outlet and the State of Minnesota, appealed the decision of the NDDH to issue a NDPDES permit to the Water Commission to the North Dakota district court. The district court affirmed the validity of the issuance of the permit by the NDDH, and as a result, Manitoba appealed to the North Dakota Supreme Court.[22] Manitoba argued that the decision of the NDDH "failed to adequately consider increased phosphorus loading in downstream waters."[23] In addition, the opponents raised concerns regarding a presumed permit violation of the North Dakota's anti-degradation regulations[24] and a lack of measures to minimize the risk of biota transfer.[25] The

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18 *People to Save the Sheyenne River, 2005, supra* note 6 (Sup. Ct. Nos. 20040376 and 20040377) (Appellant's Brief at 8–9) [Appellant's Brief].

19 "Manitoba's Interests Regarding Transboundary Water Projects", online: Manitoba Water Stewardship <http://www.gov.mb.ca/waterstewardship/water_info/transboundary/manitoba>.

20 *Ibid.*

21 See generally Manitoba Water Stewardship, *A Limited Survey of Biota in Devils and Stump Lakes, North Dakota* (Winnipeg: Manitoba Water Stewardship, 2005), online: Manitoba Water Stewardship <http://www.gov.mb.ca/waterstewardship/reports>.

22 *People to Save Sheyenne River, 2005, supra* note 6 at 324.

23 *Ibid* at 239.

24 *Ibid* at 330.

25 *Ibid* at 331.

North Dakota Supreme Court, like the district court, confirmed NDDH's decision affirming that it was not "arbitrary, capricious, or unreasonable."[26]

In April 2005, Canada wrote to the International Joint Commission ("IJC"), expressing its concern about the situation. The Canadian statement cited the IJC recommendation on the Garrison Diversion Project, which asserted that a project involving the transfer of water between different drainage basins should not proceed "unless and until Governments agreed that methods had been proven that would eliminate the risk of biota and disease transfer or that those issues were no longer of concern."[27] Canada stated its apprehension that, in its opinion, the state project did not go through an environmental assessment. Other concerns were related to the prevention of invasive species transfer and pollution passing to the waters of the Sheyenne River and Red River, which would have grave economic and environmental consequences.[28] The Devils Lake outlet did not merely raise a matter of potential damage to Manitoba waters. This controversy would set a negative precedent. Both sides would have the opportunity to cite the Devils Lake project in support of any project and only take concrete actions to protect the environment if there is a real potential for damage.

The position of the United States federal government during the entire dispute has not been clear. The Corps proposal was subjected to several conditions, in particular that the outlet would not violate the BWT. In effect, the United States requested that Canada join in referring the matter to the IJC.[29] Canada declined the request at that time, arguing that a reference was premature because the United States federal government did not definitively decide to build the proposed outlet.[30] This dispute has shown the power difference between the two nations, not only diplomatic, but economic as well.[31]

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26 *Ibid* at 333. For a definition of the "arbitrary, capricious, or unreasonable" standard, see, *ibid* at 323.

27 Embassy of Canada in Washington, *Canada's Statement to the International Joint Commission* (Washington: Embassy of Canada, 2005), online: Embassy of Canada in Washington <http://www.canadainternational.gc.ca/washington>.

28 *Ibid.*

29 Duncan B Hollis, "Disaggregating Devils Lake: Can Non-State Actors, Hegemony, or Principal-Agent Thery Explain the Boundary Waters Treaty" in *Responsibility of Individuals, States and International Organizations* (Ottawa: Canadian Council on International Law, 2007) 32 at 46; Temple University Legal Studies Research Paper No 2007–05.

30 John Knox, "Environment: Garrison Dam, Columbia River, the IJC, NGOs" (2004) 30 Can-USLJ 129 at 138.

31 Herb Gray, "Proceedings of the Canada-United States Law Institute Conference on Understanding Each Other Across the Largest Undefended Border in History" (2005) 31 Can-USLJ 287 at 289.

In early 2004, United States Secretary of State Colin Powell gave the formal assurance to the Corps that, in his opinion, the federal project would not "actually violate the 1909 Treaty as long as certain conditions are met".[32] The reference to the Corps plan was clear, as well as the need to carry on activities to prevent transfer of biota from Devils Lake to the Sheyenne and Red Rivers. However, North Dakota officials, who had complained several times in the past about the delay of the federal project and the cost associated with the measures to prevent biota transfer, took the Secretary's letter as implicit authorization for the state's proposal as well.[33] Given that no federal funds were used and neither federal jurisdiction was involved, the state project was not subject to an environmental impact assessment. In addition, the federal government did not have any influence on North Dakota's plans.[34]

In 2005, after the Supreme Court of North Dakota upheld the decision of the NDDH to issue the NDPDES permit, the United States federal government called for diplomatic negotiations with the Government of Canada and included the administrative bodies of North Dakota, Minnesota and Manitoba.[35] An agreement was signed at the end of the negotiations, which allowed for the operation of the outlet under certain conditions pertaining to environmental protection and continued monitoring of water quality. The parties agreed that it was possible to operate the outlet "in a manner that [would] not pose an unreasonable risk to the other part of the Basin."[36] In response to the concerns raised, especially regarding deterioration of water quality and other environmental effects, certain measures were taken. Specifically, the two governments agreed:

1. North Dakota would install a rock and gravel intermediate filter before opening the outlet;
2. The U.S. and Canada would cooperate in the design and construction of a more advanced filtration and/or disinfection system;

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32 Letter from Colin Powell, U.S. Secretary of State, to General Flowers, USA Army Corp of Engineers (20 Jan 2004), cited in Knox, *supra* note 30 at 133.

33 Government of North Dakota, News Release, "Hoeven Welcomes Powell Ruling on Devils Lake Outlet" (22 January 2004), online: Government of North Dakota News Releases <http://www.governor.nd.gov/media/news-releases>

34 David Whorley, "The Devils Lake Outlet and Canada-U.S. Transboundary Water Relations; or, how George C. Gibbons got the Last Laugh" (2008) Hamline L Rev 615 at 626.

35 John R Crook, "United States and Canada Agree on Measures to Address Devils Lake Flooding and Ecological Protection" (2005) 99 AJIL 909 at 910.

36 Government of Canada, News Release, No 142, "Joint Canada-U.S. Declaration on the Devils Lake Diversion Project" (5 August 2005), online: Government of Canada News Centre <http://news.gc.ca>.

3. To develop and implement a shared risk management strategy for the greater Red River Basin in cooperation with the International Red River Board of the International Joint Commission;
4. To take immediate measures to prevent the spread of any invasive species that should be identified[37]

In addition, both North Dakota and the United States federal government affirmed that they had no intention to propose or plan the construction of an inlet from the Missouri River to Devils Lake to help stabilize lake levels.[38]

North Dakota immediately closed the outlet in August 2005, after a few days of operation, due to increased sulphate levels in the Sheyenne River. In addition, North Dakota could not operate the outlet in 2006 because of state regulations.[39] In May 2006, the Water Commission asked the NDDH to modify the permit, requesting an increase to the sulphate limit, a revision of the limit of total suspended solids ("TSS"), and an extension of the operating time.[40] On 17 August 2006, the NDDH modified the permit and accepted the Water Commission's request.[41] Once again, Manitoba appealed the decision to the North Dakota district, which affirmed the decision, of the NDDH and again to the North Dakota Supreme Court.[42]

The Court, as in the 2005 case, analyzed the decision to issue the permit under an "arbitrary, capricious, or unreasonable" standard. At the end of this trial, the Court affirmed the decision of the NDDH to modify the sulphate limit provided in the permit.[43] In addition, the Court held that an anti-degradation review was not required because the use of downstream waters would not be affected by the permit modification.[44] However, the Court revised the decision to modify the TSS standard and to extend the period of operation of the outlet, giving instruction to remove the modification.[45]

The outlet is currently operating under the modified permit. The lake's natural level continues to rise and fall and was considerably diminishing until the beginning of 2008.[46] It rose again in 2009 and by summer Devils Lake had

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37 *Ibid.*

38 *Ibid.*

39 Hollis, *supra* note 29 at 40.

40 *People to Save the Sheyenne River, Inc. et al., v. North Dakota Department of Health et al.*, 2008 ND 34, 744 N.W. 2d 748 at 751 (N. Dak. Sup. Ct. 2008). [*People to Save the Sheyenne River, 2008*].

41 *Ibid.*

42 *Ibid* at 752.

43 *Ibid* at 757.

44 *Ibid* at 755.

45 *Ibid* at 759.

46 Whorley, *supra* note 34 at 623.

reached a new record of 1 450.72 feet above sea level. On 14 April 2010, the elevation registered by the United States Geological Survey was 1 451.28 feet.[47] To confront the continuous emergency, authorities raised the levee protecting the City of Devils Lake and other urban areas. A more recent project plans to raise the levee from 1 460 feet to more than 1 465.[48] Another attempt to control flooding was to increase the limit of sulphate allowed in the Sheyenne River by operating the outlet for longer periods of time and by allowing larger quantities of water. In July 2009, authorities in North Dakota had already raised the sulphate limit to 700 milligrams per litre of water on a temporary basis.[49] The aim is now to make a permanent change and raise the limit to 750 milligrams per litre, but this possibility creates new and stronger concerns on the Canadian side of the border.[50]

III. LEGAL FRAMEWORK

A. The *Clean Water Act*

The most important legislation involved in the Devils Lake controversy is the *Clean Water Act*.[51] Enacted by Congress in 1972, the purpose of the *Act* is to prohibit the discharge of any pollutant unless a National Pollutant Discharge Elimination System ("NPDES") permit is obtained.[52] To obtain a discharge permit, the applicant may request it from the Environmental Protection Agency ("EPA") or from the state if it has adopted an EPA approved permit program.[53] Each state program must meet the minimum federal requirements provided for the *Act*, but the EPA retains a right of veto for any permit issued by a state if the permit is outside the guidelines and requirements of the *Act*.[54]

Under the *Act*, a state is not only required to maintain the existing water quality standards, but also to create implementation plans to reach the standards required by the EPA.[55] When a state revises or adopts a new standard it must

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47 United States Geological Survey, "Elevation of Devils Lake" (accessed 14 April 2010), online: North Dakota Water Science Center <http://nd.water.usgs.gov>.

48 Louise Oleson, "State approves more money for Devils Lake", *Devils Lake Journal* (2 September 2009), online: Devils Lake Journal <http://www.devilslakejournal.com>.

49 Mia Rabson, "Devils Lake outlet pouring sulphate into Red", *Winnipeg Free Press* (23 October 2009) A9.

50 "Fargo hosting hearing about Devils Lake", *Winnipeg Free Press* (18 February 2010) A8.

51 *Federal Water Pollution Control Act*, 33 U.S.C. § 1251 (2010) [*Clean Water Act* or *Act*].

52 *Ibid*, § 1342.

53 *Ibid*, § 1342(b).

54 *Ibid*, § 1342(d)(2)(b).

55 *Ibid*, § 1313.

submit its decision to the EPA for approval. Specific uses must be assigned for navigable waters involved in the process and the state must determine the water quality criteria related to these uses.[56]

The *Act* is a strict set of rules with the purpose of limiting the discharge of pollutants into navigable waters. It is designed to maintain the integrity of waters and to facilitate the protection and propagation of fish, shellfish, and wildlife existing in these waters.[57] A NPDES permit is necessary to account for the addition of any pollutant to navigable waters from any point source.[58] Addition means any artificial movement of water from one body of water to another. The *Act* does not explicitly define the term addition, but Courts have given it a broad definition.[59] Also, the term pollutant can be defined broadly under federal legislation to include almost everything from biological material to any kind of waste discharged into the water.[60]

In applying the permit program, each state is required to take a wide environmental approach and must consider the protection of waters as a priority, while also looking at the economic and social impacts of the project.[61] North Dakota, like most states, has its own permit program.[62] Under its own statute, North Dakota requires compliance with the *Act* requirements and the NDDH is designated as the water pollution control agency with all the powers provided by the *Federal Water Pollution Control Act*.[63] This means that the NDDH can lawfully issue, deny, modify, and revoke a permit. The Department can also hold public hearings before making a final decision regarding the issuance and the conditions governing a permit to receive comments about the permit process.[64]

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56 *Ibid*, § 1313(c)(2)(a).

57 *Ibid*, § 1251.

58 *Ibid*, § 1362(12)(a).

59 *Roland C. Dubois and Restore v. United States Department of Agriculture, et al.*, 102 F.3d 1273 at 1299 (1st Cir. 1996).

60 *Clean Water Act*, *supra* note 51, § 1362(6). The term "pollutant" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water. For a similar definition see also, *EPA Administered Permit Programs, The National Pollutant Discharge Elimination System*, 40 C.F.R. § 122.2(b) (2010) [*EPA Permit Programs*].

61 Joseph M Flanders, "A Controversial Resolution to North Dakota's Devils Lake Dilemma" (2006) 82 NDL Rev 997 at 1013

62 *Control, Prevention, and Abatement of Pollution of Surface Waters,* N.D. Cent. Code, § 61-28-04 (2010) [*Control of Pollution*].

63 *Ibid*, § 61-28-04(12)

64 *People to Save Sheyenne River, 2005*, *supra* note 6 at 324.

B. *People to Save the Sheyenne River, 2005*

In *People to Save the Sheyenne River v. North Dakota Department of Health*, the dispute concerned the compliance of North Dakota authorities with the state discharge permit program. Manitoba argued that the NDDH failed to consider the issue of phosphorus loading in downstream waters, to do a satisfactory anti-degradation assessment and to evaluate accurately the risk of biota transfer. Considering that the NDDH had extensive discretionary power in its decision-making process, the North Dakota Supreme Court used an "arbitrary, capricious, or unreasonable" standard to evaluate the NDDH decision to issue the NDPDES permit.

Manitoba argued that the NDDH did not make a complete evaluation of the effects of water discharge on the Sheyenne River's phosphorous standard.[65] All fresh waters in North Dakota have a phosphorous standard, which is set by NDDH at 0.1 milligrams per litre.[66] The Sheyenne River frequently exceeded this limit even prior of the outlet construction.[67] Therefore, there were serious concerns about the condition of water in the river and the possible degradation of quality with the outlet operating. In addition, the permit seemed to violate the guidelines of the *Act*, which require an improvement of water standards.

The NDDH exclusively considered the possible consequences of excess phosphorous in downstream waters within domestic jurisdictions and pointed out that the phosphorous loading would not affect any valuable use of the Sheyenne River.[68] Doing so, the NDDH limited its evaluation of the effect of the outlet operation on waters in North Dakota and forgot about the bigger impact on the Red River basin. In addition, the permit did not consider phosphorous as a pollutant and their principal effect, eutrophication, was not considered to be a real problem when the permit was issued. Eutrophication results in the formation of algae blooms due to the collection of nitrogen and phosphorous, and studies indicate a low quantity of nitrogen in Sheyenne River waters,[69] resulting in a low risk of eutrophication. However, this phenomenon will not end its effects at the border and there is a concrete risk that it will irreparably affect all downstream waters, especially Lake Winnipeg.

The Court, like the NDDH, evaluated the matter by mainly referencing the Corps EIS study, which determined that phosphorus loading was not an

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65 *Ibid* at 329.

66 *Standards of Quality for Waters of the State,* North Dakota Admin. Code, § 33-16-02.1-09 Table 1 (2008) [*Standards of Quality*].

67 EIS, *supra* note 1 at 5–83.

68 *People to Save the Sheyenne River, 2005*, *supra* note 6 at 329.

69 *Ibid.*

impediment to the construction of the outlet.[70] The Court considered that receiving waters did not possess enough nitrogen to increase eutrophication.[71] In doing so, however, the judges did not apply the applicable rules under North Dakota law. There is a specific phosphorous standard for Sheyenne River waters. In addition, the Court evaluated consequences on immediate downstream waters without considering the effects that phosphorous loading could have in Manitoba.

Manitoba also argued that the permit did not accord with anti-degradation regulation as required by North Dakota law.[72] In Manitoba's opinion, the NDDH did not properly evaluate downstream degradation and did not consider less degrading alternatives. In addition, the NDDH did not demonstrate important economic and social developments to justify activities causing water degradation, as required by law.[73] Under the *Act*'s anti-degradation policy, states are required to maintain the uses of any water body and to implement water quality criteria in order to prevent any decrease to the water quality level.[74] For example, if it is possible to fish in a river, a state must take action in order to prevent the discharge of any pollutant that will represent a risk to the survival of aquatic species and in particular those allowing further fishing.

The Court held that adding phosphorous would not alter any beneficial use of downstream waters and that an anti-degradation review was not essential in order to issue the permit.[75] Additionally, in the Court's opinion, the NDDH did an appropriate evaluation of less degrading or non-degrading alternatives and the prevention of future damages caused by rising water. There were substantial economic and social benefits supporting the NDDH's assessment of anti-degradation issues and the decision to give permission to operate the outlet.[76]

Manitoba also disagreed with the consideration of the NDDH of the risk of invasive species transfer and the appropriate technology necessary to control this phenomenon.[77] The *Act* considers invasive species as a pollutant and, in Manitoba's opinion, the NDDH did not evaluate this matter correctly before issuing the permit.[78] The permit program requires the use of the best available

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70 *Ibid* at 330.

71 *Ibid.*

72 *Ibid.*

73 *Ibid.*

74 *Establishment of Water Quality Standards*, 40 C.F.R., § 131.12 (2010).

75 *People to Save the Sheyenne River, 2005*, *supra* note 6 at 331.

76 *Ibid.*

77 *Ibid.*

78 Appellant's Brief, *supra* note 18 at 15.

technology and does not set a numeric standard regarding biota transfer.[79] Manitoba argued that it was not necessary to prove a risk before taking action, but the NDDH responded that they did not consider biological materials as a pollutant and that no study showed a clear risk of damage.[80] Therefore, the permit was issued considering the absence of a specific concern regarding biota transfer and the NDDH concluded that the use of a mesh screen was enough to minimize the risk of transferring adult fishes.[81]

The Court did not answer the question of whether invasive species are pollutants. The judges relied, once again, on the Corps EIS and decided that the decision of the NDDH was correct. They cited the fact that the study did not show any biota able to create significant damage downstream. In addition, the Court said that any species living in Devils Lake would be found in other bodies of water, transferred through natural vectors, such as wind or other animals or even through recreational boats or trailers.[82] In the Court's opinion, the normal, natural risk of species transfer can be compared to the one arising from a project like an outlet, which is able to move a large quantity of water in a very short time.

Nevertheless, the Court's approach does not seem to be really coherent. Possible transfer of biota due to recreational uses cannot be equated to the risk arising from the continuous and permanent transfer of waters caused by the project.[83] Furthermore, the Court did not apply the applicable law, like they did when evaluating the other issues. The *Act* clearly requires the use of the best available technology. North Dakota law seems also to be clear regarding this requirement.[84] The Court looked at the Corps EIS report and directed its attention to the evaluation of the risk of invasive species transfer, but it did not adequately consider the technology the Corps required to prevent this phenomenon, specifically a sand filter able to minimize the risk of biota transfer.

C. *People to Save the Sheyenne River, 2008*

In May 2006, the Water Commission asked the NDDH to modify three conditions of the permit:

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79 *Clean Water Act, supra* note 51, § 1331(b)(2).

80 Appellant's Brief, *supra* note 18 at 14–19

81 *People to Save the Sheyenne River, 2005, supra* note 6 at 332.

82 *Ibid.*

83 Appellant's Brief, *supra* note 18 at 24–25.

84 *Standards of Quality, supra* note 66, § 33-16-02.1-02(2) (2001). "All known and reasonable methods to control and prevent pollution of the waters of this state are required."

1. Raise the sulphate limit at Bremen, in the Sheyenne River, from 300 milligrams per litre to 450 milligrams per litre, or alternatively, to increase the sulphate limit by 15 percent;
2. Operate the outlet for a longer period;
3. Remove or revise the 100 milligrams per litre limit for total suspended solids.[85]

In August 2006, the NDDH modified the permit by incorporating the Water Commission's requests. Manitoba challenged this decision and the dispute came once again in front of the North Dakota Supreme Court.

Manitoba argued that increasing the sulphate limitation without a proper anti-degradation review was against North Dakota regulations,[86] particularly that the possible degradation of downstream waters was a reason to complete a detailed anti-degradation review.[87] In addition, Manitoba argued that increasing the sulphate limitation and modifying the extension of the operating period at the same time would increase the total annual loading by more than 15% above the provision of the initial permit.[88] The modification of the permit without conducting an anti-degradation review, which is required under North Dakota law, should be considered unlawful.[89] From the point of view of the opponents, the possible increase of sulphate loading throughout the year requires an appropriate review to evaluate the potential consequences on the downstream environment. The NDDH replied with the same arguments used in front of the Supreme Court of North Dakota two years earlier. In the opinion of the NDDH, the anti-degradation review was not necessary because no beneficial use would have been affected by the permit modification. The belief was that increasing the sulphate limit to 450 milligrams per litre would not have deleterious effects in downstream waters. Sulphate standards are only intended to protect drinking water uses, the permit modification would not harm these uses.[90] In addition, the sulphate level in the Sheyenne River was often above the limit of 300 milligrams per litre stated in the initial permit, which prevented the operation of the outlet for long periods.[91]

The Court referred to the studies submitted by the NDDH and upheld the decision not to conduct an anti-degradation review as correct. The judges also considered that the modified permit limit would not be greater than 15% for any parameter of concern.[92] Moreover, the Court found the criteria applied by the

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85 *People to Save the Sheyenne River, 2008*, *supra* note 40 at 751.

86 *Ibid* at 753.

87 *Ibid* at 754.

88 *Ibid.*

89 *Standards of Quality*, *supra* note 66, § 33-16-02.1 (Appendix IV).

90 *People to Save the Sheyenne River, 2008*, *supra* note 40 at 755.

91 *Ibid.*

92 *Ibid.*

NDDH for the evaluation of the sulphate concentration in the Sheyenne River water was correct. Under the law, the NDDH has wide discretion in interpreting the anti-degradation procedure.[93] In the Court's opinion, the NDDH correctly applied the rules in light of the concrete case. They presented various complexities in technical areas, which did not trigger the requirements for an anti-degradation review.[94]

Manitoba also argued that the permit modification did not meet a "cause", as required by law.[95] The North Dakota regulation, incorporating federal rules, required a cause for the modification of a permit. The director must have received new information or it was necessary to correct a technical mistake.[96] Manitoba claimed that the NDDH did not receive any new information. NDDH explained that the sulphate reading at the two checkpoints on the Sheyenne River were not operating when the original permit was issued; and several tests issued shortly after the outlet began operation indicated that the normal sulphate level in the river was above the limitations set in the initial permit.[97] The information available before 2005 was limited, but the measurement done later showed that the real level of sulphates at the discharge point was higher and more variable than previously believed. In the opinion of the NDDH, this was considered new information.[98]

The Court concluded that the decision of the NDDH to treat the new readings as new information was correct because this information was not available when the initial permit was issued.[99] In addition, the judges considered how knowledge of these results when the initial permit was issued would have justified different permit conditions.[100] In its analysis, the Court cited decisions of agencies to modify a permit that were not considered arbitrary and capricious, even if the information was not new. In these cases, information was available

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93 *Standards of Quality*, *supra* note 66, § 33-16-02.1 (Appendix IV). "The characteristic of the receiving water body is relevant in regulating a parameter of concern". In this case the NDDH did not applied mass loading criteria, as Manitoba required, because they are usually applied to water bodies as lakes, which have a hydraulic residence time. Instead, the NDDH evaluated sulphate addition to water bodies with an established drinking water use in terms of concentration.

94 *People to Save the Sheyenne River, 2008*, *supra* note 40 at 755.

95 *North Dakota Pollutant Discharge Elimination System*, North Dakota Admin Code, § 33-16-01-25(2) (2001).

96 *EPA Permits Program*, *supra* note 60, § 122.62(a).

97 *People to Save the Sheyenne River, 2008*, *supra* note 40 at 756.

98 *Ibid* at 757.

99 *Ibid.*

100 *Ibid.*

when the original permit was issued, but the high degree of technical expertise required allowed changing the consideration.[101]

Manitoba's complaints were also directed to the decision of the NDDH to remove the TSS limit and to extend the period of outlet operation on the basis that there was a lack of information to correctly assess the permit. The NDDH did not rely on a "technical mistake" to support its decision to modify the permit.[102] Instead, the NDDH replied that at the time the permit was issued there were no TSS stream standards for waters in North Dakota and that the TSS limit was set according with engineering practices. The Water Commission asked, and the NDDH agreed, to replace the numeric TSS limit with a best management practice. This practice still required examining the water and the implementation and maintenance of the system in order to minimize any harmful effect in the Sheyenne River.[103] In addition, the Health Department affirmed that the modification was necessary to correct "errors in calculation or mistaken interpretations of law made in determining permit conditions."[104]

The Court turned its attention to the record submitted by the NDDH and pointed out that the Water Commission did not show evidence that TSS standards were unavailable at the time of the initial permit issuance. Neither facts nor the law supported the decision to undertake a different method to monitor TSS in the Sheyenne River. Regarding the "technical mistake", there was no proof that an "error in mathematical calculations, computer errors, clerical mistakes, and the like" had been committed in issuing the permit, hence rejecting the justification to change the TSS standard.[105] As the Court stated, the only reason behind the decision to modify the permit was that the NDDH found that the best management practices was a more appropriate standard. This conclusion was not supported with convincing legal arguments or technical facts.[106]

In relation to the decision to extend the operation period, the NDDH claimed that the permit needed to be modified in order to improve flood-control. The Court decided that the NDDH had no reason to modify the permit because there was no evidence of new information or of the existence of an error.[107]

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101 *Calcasieu League for Environmental Action Now v. Herbert W. Thompson*, 661 So. 2d 143 at 148–150 (La Ct. App. 1995); see also *Marsh et al. v. Oregon Natural Resources Council, et al.*, 490 U.S. 360 at 372–385 (1989).

102 *People to Save the Sheyenne River, 2008*, *supra* note 40 at 757.

103 *Ibid* at 758.

104 *EPA Permits Program*, *supra* note 60, s 122.62(a)(15).

105 *People to Save the Sheyenne River, 2008*, *supra* note 40 at 758–759.

106 *Ibid* at 759.

107 *Ibid* at 759.

The Court took the same approach as in the 2005 case, particularly concerning the sulphate limit increase and the anti-degradation review requirement. Instead of applying the pertinent regulation in the field, the Court decided to evaluate the matter by considering the technical reports showing that harmful effects downstream were not likely to occur. The attention of the Court was directed primarily to the effects on waters in the United States and it did not consider possible consequences for the other side of the border. Both cases demonstrate the limits of domestic jurisdiction in the resolution of transboundary issues. The application of national rules is confined to a state's borders. The decision of the Supreme Court of North Dakota to direct its attention toward the effects of the diversion solely in the United States can be understood. Every court is automatically oriented to pay more attention to the effects of the decision in its own jurisdiction, rather than looking at others. In addition, the application of international law can be difficult for a court that is not familiar with those rules. Therefore, it is important to find different legal regimes with different instruments and different ways to enforce them in order to solve the Devils Lake controversy and every other dispute rising along the border between Canada and the United States.

IV. THE ROLE OF INTERNATIONAL LAW

A. The Garrison Diversion Project

The Devils Lake Outlet controversy applied the important precedent of the Garrison Diversion Project. In 1974, the United States Department of the Interior submitted a final statement for a very ambitious project. The aim of this project was to move water from the Missouri River to the semi-arid areas of north-central North Dakota in order to irrigate 250 000 acres of farmland.[108] The idea was to use the huge, artificial basin created with the construction of the Garrison Dam, Lake Sakakawea, and divert part of this water to areas largely situated in the watersheds of the Souris River and the Red River, which are both part of the Hudson Bay drainage basin.[109]

This project raised several concerns because it involved inter-basin water transfer and connected two completely different ecosystems together. Opponents of the Garrison Diversion argued that this project would cause extremely serious environmental consequences. In particular, Canada focused on the possibility of

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[108] Sanford E Gaines, "The International Law Aspect of the Garrison Diversion Project" (1974) 4 Envtl L Rep 50085 at 50085.

[109] Sheryl A Rosenberg, "A Canadian Perspective on the Devils Lake Outlet: Towards an Environmental Assessment Model for Transboundary Disputes" (2000) 76 NDL Rev 817 at 823.

increased flooding due to the additional volume of water. In addition, there was a concrete risk of increasing the salinity of the Souris River, which would have devastating consequences both for municipal and agricultural uses of the water and risk increasing the phenomenon of eutrophication in Lake Winnipeg.[110]

In its complaint, Canada referred in particular to Article IV of the *Boundary Waters Treaty*,[111] which states that parties agree to not pollute on either side waters flowing across the boundary that would cause "injury of health or propriety on the other."[112] Another concern taken into serious consideration by both parties was the serious threat of invasive species transfer from the Missouri River to the Hudson Bay basin. This would cause irreversible damage to Canadian waters.[113] Therefore, in 1975 the United States and Canada referred the question to the IJC in order to evaluate the effects of the Garrison Diversion on Canadian waters. The IJC was also asked to make recommendations to ensure that the provisions of Article IV were honoured.[114]

In 1977, the IJC issued its report and recommended that the project did not proceed. The IJC considered the risk of irreversible damage caused by foreign biota to be concrete and remarked that it was impossible to completely rely upon the proposed measures to minimize and control the effects.[115] The IJC adopted a precautionary approach on the matter. For the project to proceed, the two governments would have to agree on proven methods that "would eliminate the risk of biota and disease transfer or that those issues were no longer of concern."[116]

North Dakota never gave up its dream to use the water of the Missouri River for irrigation purposes. In 1986, the Government of North Dakota adopted a text called the *Garrison Diversion Unit Reformulation Act*. It was a compromise among several interests involved and took into account the work of the previous IJC on the potential problems associated with diverting water from the Missouri River basin to the Hudson Bay basin.[117] The *Reformulation Act* once again suggested the possibility of building a new dam to divert water from

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110 Gaines, *supra* note 108 at 50087.

111 *Boundary Waters Treaty*, *supra* note 9.

112 International Joint Commission, *Report to the Governments of Canada and the United States on Transboundary Implication of the Garrison Diversion Unit* (Washington: International Joint Commission, 1977) at 1–2.

113 *Ibid* at 54.

114 *Ibid* at 2.

115 *Ibid* at 102–119.

116 *Ibid* at 121.

117 "Potential Transboundary Water Projects", online: Manitoba Water Stewardship <http://www.gov.mb.ca/waterstewardship/water_info/transboundary/potential>.

the artificial basin to arid areas of North Dakota. However, the project needed the approval of the Secretary of State and the Administrator of the Environmental Protection Agency. These two bodies had to explore possible violations of the *Boundary Waters Treaty*.[118]

In 2000, the *Reformulation Act* was amended by the *Dakota Water Resources Act*, a document with the same aim as the previous one but with several important differences.[119] In particular, the *Water Resources Act* made it easier to build a new diversion project. The *Water Resources Act* acknowledged the possibility of transferring water from the Missouri River into the Hudson Bay Basin provided certain conditions were met, including compliance with the *Boundary Waters Treaty*.[120] However, the *Act* did not authorize a study to stabilize Devils Lake levels through an inlet draining water from the Missouri River drainage basin into the lake.[121]

The possibility that the Devils Lake outlet was just the precursor of a more ambitious project raised serious concerns in Canada. The Government of Canada and the Government of Manitoba based their opposition to the project "on the costly, unpredictable, irreversible and catastrophic economic and environmental damage which can occur from inter-basin diversions of water."[122] The Government of Canada pointed out the devastating environmental and economic effects caused in the Great Lakes by invasive species like zebra mussels, sea lampreys, and Whirling disease, and included evidence that these invasive species were now found in the Missouri River system. In Canada's opinion, both the Garrison Diversion and the Devils Lake Outlet projects would violate the *Boundary Waters Treaty* by polluting and causing damage to Canadian waters.[123]

B. The Relevance of the *Boundary Waters Treaty*

One of the conditions for the Secretary of State to approve the Corps project was that the project would not violate the *Boundary Waters Treaty*. For this reason, opponents of the project invoked the duty not to pollute, as stated in Article IV, and they asked to refer the matter to the IJC for a review. However,

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118 Rosenberg, *supra* note 109 at 828–829.

119 *Dakota Water Resources Act of 2000*, Pub. L. 106-554, 114 Stat. 2763 at 2763A–281.

120 *Ibid* at 2763A–282.

121 *Ibid* at 2763A–289–290. However, this study is authorized under the *Energy and Water Development Appropriations Act of 1993*, Pub. L. 102-377, 106 Stat. 1315, at 1332 (1992).

122 "Garrison Diversion and the Devils Lake Outlet: The Canadian Position", online: Embassy of Canada in Washington <http://www.canadainternational.gc.ca/washington>.

123 *Ibid.*

the United States federal government refused to give its consent.[124] Instead, the United States preferred diplomatic negotiations with Canada in order to solve the dispute without involving the IJC. On the other side, Canada refrained from unilaterally referring the matter to the IJC, probably because they were afraid to break 100 years of practice.

The lack of an explicit definition of pollution under the *Boundary Waters Treaty* made it difficult to correctly assess the terms of the controversy. General practice of the IJC shows that phosphates are considered pollution due to the high risk of eutrophication. In fact, North Dakota stopped the operation of the outlet several times because of the high level of phosphate transfer into the Sheyenne River.[125] In Canada's opinion, invasive species ought to be also considered a pollutant due to the detrimental and irreversible effects the introduction of non-native species can have in water bodies.[126] Canada supported its concerns by affirming that the introduction of zebra mussels into the Great Lakes has affected the water quality and caused considerable economic loss.[127] According to the purpose of the *Treaty* and considering previous cases, there is an evident violation of the provisions of the *Treaty* in the case of Devils Lake, due to the risk of invasive biota that could generate "injury of health and propriety" on the other side of the border.

It appears that North Dakota authorities did not properly evaluate the risk of invasive biota and did not consider it a matter of real concern. They minimized the risk by arguing that species can move naturally from one body of water to another.[128] In addition, North Dakota seemed reluctant to think about biological organisms as pollutants, even though this view differs from the *Clean Water Act*, which considers biological material as pollutant.

The problem of pollution in international law is very complicated. The most important international agreements do not uniformly define what a pollutant is. Several dissimilar definitions have been used. In the *Boundary Waters Treaty* there is no definition at all. However, the United Nations *Convention on the Law of the Non-Navigational Uses of International Watercourses* seems to include invasive species in the definition of pollutant.[129] Under Article 21 of the *Convention*, a pollutant is considered anything that could alter the quality of

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124 Flanders, *supra* note 61 at 1019.

125 Bart Kempf, "Draining Devils Lake: The International Lawmaking Problems Created by the Devils Lake Outlet" (2007) 19 Geo Int'l Envtl L Rev 239 at 255.

126 Rosenberg, *supra* note 109 at 845.

127 *Supra* note 122.

128 *People to Save the Sheyenne River, 2005*, *supra* note 6 at 324.

129 The Convention is annexed to *Convention on the Law of the Non-Navigational Uses of International Watercourses*, GA Res 51/229, UNGAOR, 51st Sess, UN Doc A/RES/51/229 (1997) [*Convention*].

downstream waters.[130] Article 22 directly deals with the introduction of alien species. It states: "Watercourse States shall take all measures necessary to prevent the introduction of species, alien or new, into an international watercourse which may have effects detrimental to the ecosystem of the watercourse resulting in significant harm to the other watercourse States."[131] Therefore, under the *Convention* guidelines, even if invasive species are not considered a pollutant each state shall take measures in order to prevent any harm resulting from their introduction in downstream waters. Although the *Convention* has not yet entered into force, it represents an important instrument and is able to affect the conduct of states in the field. It includes recognized principles that should be followed by the international community and codifies generally accepted customary law.[132]

A major problem is the lack of direct enforceability of the *Boundary Waters Treaty*.[133] Only the IJC can directly enforce the *Treaty* through its arbitrary function. Manitoba could not claim for the *Treaty* to be respected by the North Dakota Supreme Court. In other words, the Court is under no obligation to apply the rules contained in the international agreements to which the United States is a party. It seems to be difficult for the United States federal government to force a state to comply with international law. Theoretically, the United States federal government has the capacity to sue a state in Federal Court and get a decision obligating the state to respect international law obligations.[134] Although there are some precedents supporting this opinion,[135] the United States federal government has not used this power for a long time, highlighting a clear wish not to begin dangerous debates over power division.

The IJC is able to directly enforce the *Boundary Waters Treaty* through its quasi-judicial function, but this does not find application in the Devils Lake dispute. The IJC has final authority "to approve uses, obstruction and diversion of boundary waters" that could have effects on water quantities on the other side of the border.[136] In this case, the parties would have an obligation to refer the matter to the Commission for its final approval. Nevertheless, none of the

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130 *Ibid*, art 21. "For the purpose of this article, "pollution of an international watercourse" means any detrimental alteration in the composition or quality of the waters of an international watercourse which results directly or indirectly from human conduct"

131 *Ibid*, art 22.

132 For the role of the *Convention*, see generally Stephen C. McCaffrey, *The Law of International Watercourses*, 2d ed (Oxford: Oxford University Press, 2007) at 375–377.

133 Daniel K. DeWitt, "Great Words Needed for the Great Lakes: Reasons to Rewrite the Boundary Waters Treaty of 1909" (1993) 69 Ind LJ 299 at 323.

134 Knox, *supra* note 30 at 135.

135 *Sanitary District of Chicago v. United States*, 226 U.S. 405 at 425–426 (1925).

136 *Boundary Waters Treaty*, *supra* note 9, arts III–IV.

waterways involved in the controversy, that is Devils Lake, the Sheyenne River, and the Red River, constitute boundary waters under the *Treaty*.[137] Although the Red River crosses the border between the United States and Canada, the definition of boundary waters in the *Treaty* excludes this river.[138] Hence, there is no obligation for the United States to obtain the approval of the IJC for the Devils Lake outlet project.

Most of the problems arising in cases like Devils Lake could be solved by giving self-execution to the *Boundary Waters Treaty*. In this way all actors involved in the controversies would be able to ask any court to enforce provisions contained within it, and non-federal actors could be sued and forced to comply with international obligations.[139] The *Treaty* contains very specific obligations and the IJC has a rich body of practice that would help courts called to apply these rules. However, what seems to be missing is political will. While Canada would probably be more willing, the United States considers that no international treaty should be self-executing.[140]

The effectiveness of the *Boundary Waters Treaty* could be improved by assigning non-federal actors, like provinces in Canada, the capacity to claim international law remedies from international institutions. Those actors usually suffer the most intense consequences and have fewer legal remedies to defend their rights. The active involvement of those actors in the international law process would also reinforce the role of the IJC in the resolution of disputes between the United States and Canada, a role that has been blunted by the behaviours of two federal governments reluctant to refer new disputes to the IJC.[141]

In the last decade the diplomatic relationship between the two countries has deteriorated. A long and fruitful cooperation on transboundary matters has turned into a strictly unilateral approach by both sides and this limits the role of

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137 Hollis, *supra* note 28 at 37.

138 *Boundary Waters Treaty*, *supra* note 9, Preliminary Article. "Boundary waters are defined as the waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms, and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary."

139 Knox, *supra* note 30 at 138.

140 Curtis A Bradley, "*Breard*, Our Dualism Constitution, and the International Conception" (1999) 51 Stan L Rev 529 at 541.

141 Austen L Parrish & Shi-Ling Hsu, "Embracing Reciprocity: Revisiting Domestic Legal Solutions to Canada's Transboundary Pollution Problems" in *Responsibility of Individuals, States and International Organizations* (Ottawa: Canadian Council on International Law, 2007) 73 at 75.

international bodies.[142] Devils Lake is a clear example where the use of diplomacy, rather than international law instruments, is the favourite tool to solve bilateral controversies. Nevertheless, in this case the solution appears to be unsatisfactory for many of the actors involved, including the Province of Manitoba, and it demonstrates the very different power positions occupied by the United States and Canada.[143]

C. A New International Approach

Devils Lake and its outlet became an irritating case for diplomats in both Canada and the United States. Unfortunately, this controversy might set a precedent for other disputes along the border.[144] Domestic jurisdiction was little help in solving the legal issue of the outlet construction. National boundaries do not stop pollution and a unilateral approach does not improve standards of environmental sustainability. In environmental protection, no nation can only look at its own business or postpone essential actions due to other economic interests. Devils Lake reduced cooperation between the United States and Canada on transboundary issues. Both countries raised several concerns regarding international institutions and international law instruments, which was seen as a threat to their national interests.[145] However, in a global economy only the application of globally accepted rules can have a tangible effect on environmental issues.

The international community has tried to respond to the heightened demand for certainty in the use of international rivers through codification. In the 1990s, after twenty years of work of the International Law Commission, the United Nations General Assembly adopted the *Convention on the Law of the Non-Navigational Uses of International Watercourses*. It codified principles of international customary law and required a broader and more cooperative approach on environmental issues. In particular, the *Convention* definitively recognized equitable and reasonable utilization and the no-harm rule as the main principles in the field. It required countries to not limit their attention to only the portion of a river flowing within their national borders, but demands active participation in the joint management of watercourses and the respect for the rights of the other riparians.

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142 *Ibid* at 76.

143 Hollis, *supra* note 29 at 45.

144 Austen L Parrish & Shi-Ling Hsu, "Litigating Canada-U.S. Transboundary Harm: Environmental Lawmaking and the Threat of Extraterritorial Reciprocity" (2007) 48 Va J Int'l L 1. The authors describe two other disputes. The first one is the Trail Smelter in British Columbia and the second one is the long dispute over the Canadian export of softwood lumber.

145 *Ibid* at 20–22.

The *Convention* would be a useful tool in the resolution of controversies like Devils Lake. All international instruments in the field generally incorporate a guideline principle, equitable and reasonable utilization, leaving all the others orbiting around it. The consequence is often a separate application of the distinct rules, looking individually to the prevention of transboundary pollution and to the reasons a country has to implement some activities and the possible benefits resulting from these activities. This circumstance can allow harmful projects to be carried on and makes it difficult to prevent degradation of the environment. On the other hand, the *Convention* adopts an integrated approach that involves a balance between the prohibition to cause significant harm and the right to an equitable use of a shared watercourse. The most direct consequence of this approach is a compromise among all different and conflicting interests that usually lead to a dispute concerning an international watercourse. In the case of Devils Lake outlet, for example, the need to prevent additional damage due to the flooding in the lake's area contrasts with the will of Manitoban authorities to protect waters in the province. Through the integrated application of both the equitable and reasonable approach and the no-harm rule, it would be possible to better achieve a satisfactory balance of those interests and to enhance cooperation between the United States and Canada.

One of the biggest problems in the controversy arising around Devils Lake is the lack of an independent investigation able to advise a reasonable compromise. The fact finding procedure contained in Article 33 of the *Convention* can be used to avoid long term disputes.[146] It would provide parties with incontrovertible information and would help in determining to what extent the diversion of Devils Lake water is reasonable compared to the possible damages affecting Canadian waters. The fact-finding Commission would have access to all necessary information and would be allowed to inspect the outlet and related facilities.[147] Unlike the IJC, where the United States and Canada have conventionally requested its advisory opinion jointly, the fact finding procedure in the *Convention* can be activated at the request of any of the parties. Therefore, each country would be able to get an independent point of view on the matter without affecting the delicate diplomatic balance created within the *Boundary Waters Treaty*.

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146 *Convention*, *supra* note 129, art 33(3). "Subject to the operation of paragraph 10, if after six months from the time the request for negotiations referred to in paragraph 2, the parties concerned have not been able to settle their dispute through negotiation or any other means referred to in paragraph 2, the dispute shall be submitted, at the request of any of the parties to the dispute, to impartial fact-finding in accordance with paragraph 4 to 9, unless the parties otherwise agree."

147 *Ibid*, art 33(7).

In addition, the provisions concerning transboundary pollution contained in the *Convention* are less vague than those in the *Boundary Waters Treaty*. Even though the definition of what can be considered pollution is very general, it encompasses "any detrimental alteration in the composition or quality of the waters of an international watercourse."[148] The consequence of this approach is that the alteration in water quality downstream caused by the operation of the Devils Lake outlet would be considered as the result of pollution. Furthermore, this is explicitly a qualified obligation requiring significant harm to be caused to another state,[149] which makes its application less suitable to different interpretations. Lastly, Article 22 of the *Convention* contains a specific prohibition to introduce alien or new species into international watercourses, which is one of the biggest concerns Canada and Manitoba have about the operation of a Devils Lake outlet. Although the obligation requires a causal relationship between the introduction of the species and the significant harm to the other riparian state, this provision applied to the case analyzed here would represent an important guideline to correctly evaluate the effects alien species would have on Canadian waters and to undertake corrective measures in order to prevent alteration in water ecosystems.

In the field of international watercourses, significant political and economic interests are involved and countries are generally reluctant to give up, even partially, their sovereignty over watercourses flowing within their territory. Good relationships with neighbouring countries are the foundation for good diplomacy, as some disputes can cause economic loss and long periods of uncertainty. Therefore, the adoption of agreements that establish legal mechanisms capable of resolving these controversies is fundamental. Yet, over time every legal instrument loses its ability to work and requires improvements and adaptation to new circumstances.[150] This is particularly relevant in the field of environmental protection. Treaties are negotiated in light of the current situation, but the world changes and increased economic activity continues to threaten the environment. In addition, new scientific knowledge may lead to a better understanding of the effects of human activity on the planet and create the foundation for new legal obligations.[151]

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148 *Ibid*, art 21(1).

149 *Ibid*, art 21(2).

150 Hanspeter Neuhold, "The Inadequacy of Law-Making by International Treaties: "Soft Law" as an Alternative?" in Rüdiger Wolfrum & Volke Röben, eds, *Developments of International Law in Treaty Making* (Berlin: Springer, 2005) 39 at 46.

151 Gerhard Loibl, "Conferences of Parties and the Modification of Obligations" in M Craven & M Fitzmaurice, eds, *Interrogating the Treaty: Essays in the Contemporary Law of Treaties* (Nijmegen: Wolf Legal Publishers, 2005) 103 at 104.

The *Boundary Waters Treaty* has regulated boundaries issues between the United States and Canada for a century, but in the last decade it seems to have lost part of its effectiveness. In 1909, the political and social situation in North America was completely different. Since then the population has increased and economic activity has exploded.[152] Most importantly, potential threats arising nowadays from water pollution are different than those in the minds of the people who wrote Article IV of the *Treaty*. Finally, at that time Canada did not have the power to assume international obligations and Great Britain signed the *Treaty* on behalf of Canada.[153]

During the 20th century, the United States has been the most important economic partner for Canada and this circumstance has created a strong trade bond between the two countries: in 2010, the United States exported to Canada $248.8 billion worth of goods and imported another $276.5 billion from Canada[154] Many sectors of Canada's economy receive large American investment and Canadian companies also own considerable assets in the United States. There is integration in the two economic systems, but Canada is also economically dependent on its neighbour.[155] The two countries have experienced different roles and have dissimilar power positions in the international community. The United States has always been a unilateralist on international issues and has rejected the role of almost every international institution. This can also be seen in the relationship between the United States and the *Boundary Waters Treaty*. The IJC is sometimes considered a threat to their sovereignty rights, even though it has always acted impartially and has shown independence from national interests and political pressures.[156]

In the Devils Lake controversy, the United States federal government gave the power to decide the compliance of the federal outlet with the *Boundary Waters Treaty* to Secretary Powell and rejected any role for the IJC in evaluating the project. In some observers' opinion, the United States decided their position on the matter, imposed it on Canada and left the northern neighbour no choice.

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152 Noah D Hall, "The Centennial of the Boundary Waters Treaty: A Century of United States – Canadian Transboundary Water Management" (2008) 54 Wayne L Rev 1417 at 1418.

153 *Boundary Waters Treaty*, *supra* note 9, Preamble.

154 "Foreign Trade Statistics: Trade in Goods with Canada", online: United States Census Bureau Foreign Trade Division <http://www.census.gov/foreign-trade/balance/c1220.html>.

155 Marlene Jennings, "Proceedings of the Canada-United States Law Institute Conference on Understanding Each Other Across the Largest Undefended Border in History" (2005) 31 Can-USLJ 385.

156 Leonard H Legault, "The Management and Resolution of Cross Border Disputes as Canada/U.S. Enter the 21st Century: The Roles of Law and Diplomacy in Dispute Resolution: the IJC as a Possible Model" (2000) 26 Can-USLJ 47 at 50.

Even in the negotiations held in August 2005, Canada had no opportunity to obtain tangible results.[157]

A solution for the issues explained above is needed in order to face the environmental challenges of the new century. The IJC and its body of decisions could represent a model to start from, considering the importance that Article IX of the *Treaty* had in the past. The advisory pronouncements of the IJC on many transboundary issues have helped develop rules governing shared watercourses, and a greater use of the Commission in its advisory role should be encouraged.[158] However, the difficulties encountered in Devils Lake and other transboundary disputes suggest that the *Treaty* is probably out of step with the most recent developments of international environmental law. In addition, concerns about sovereignty and the failure to submit important matters to the IJC have undermined the role of the IJC on transboundary issues.[159]

There is undoubtedly a need to revise some of the provisions contained in the *Treaty* in order to make it more efficient for modern environmental challenges. The United States and Canada should consider reviewing and perhaps amending the *Treaty*[160] to improve some of its mechanisms, especially those regarding the IJC and its involvement in dispute resolution. A conference held for the purpose of implementing the *Treaty* must also actively involve non-federal actors, like boundary provinces and states. The participation of these bodies is not new to the resolution of transboundary problems and the two countries employed it recently in the attempt to prevent bulk water removal from the Great Lakes.[161] Certainly, this is a better way to understand the interests and concerns of all the parties involved, as local authorities have better knowledge of the territory.

The United States and Canada should consider giving non-federal actors the right to claim the intervention of the IJC on matters that affect them directly, at least in its advisory and investigative function. This would give a new and more incisive role to the IJC and provide these actors with a new legal instrument to defend their rights at the same time. In several spheres of

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157 John Ibbitson, "Canada Must Swallow Its Devils Lake Mistakes", *The Globe and Mail* (11 August 2005) A15, cited in Hollis, *supra* note 29 at 46.

158 Legault, *supra* note 156 at 55.

159 Itzchak E Kornfeld, "Polycentrism and the International Joint Commission" (2008) 54 Wayne L Rev 1695 at 1697.

160 Since the *Boundary Waters Treaty* has just two parties, the amendment process would be less complicated than for multilateral agreements.

161 Peter Bowal, "Canadian Water, Constitution, Policy, and Trade" (2006) Mich L Rev 1141 at 1156–1159. In particular, the author describes two agreements signed in 2005: the *Great Lakes-St. Lawrence River Basin Sustainable Water Resources Agreement* and the *Great Lakes-St. Lawrence River Basin Water Resources Compact*.

international law the participation of non-state actors is recognized and even considered a fundamental part of the legal regime. The *North American Free Trade Agreement* is an example of involving private actors.[162] Chapter 11 of *NAFTA* deals with investments and enforces a duty for each party to accord investors and investments of investors of another party "treatment no less favourable than that it accords, in like circumstances, to its own investors."[163] This provision, called National Treatment, is followed by the Most-Favoured-Nation Treatment, which grants investors of a party the same treatment of investors of any other party or of a non-party.[164] In order to implement those provisions, the Agreement provides investors, both private and public, with the ability to submit a claim that a party has breached its obligations to arbitration.[165]

The *Convention for the Protection of Human Rights and Fundamental Freedoms*[166] is another notable example of a legal regime where private actors can challenge a state in front of a transnational body, with the purpose of enforcing international regulations. Under the *ECHR*, the European Court "may receive petitions...from any person, non-governmental organization or group of individuals claiming to be victim of a violation by one of the High Contracting Parties."[167] The Court cannot force parties to change their legislation, but can award compensation to the injured party. Its decisions are binding and set guidelines for the future, which forces the parties to make appropriate changes to their legal systems.

These models are too extreme to be fully applied to environmental issues, but they show that the active participation of non-state actors is acceptable in international law. However, giving private actors the capacity to resort to an international court on environmental matters could create problems. A hypothetical interest may be claimed by anyone and the number of cases could be difficult to manage. In addition, countries are reluctant to accept potential opposition from groups of individuals claiming environmental concerns. Nevertheless, a greater and more active participation of non-federal actors, which in the case of the *Boundary Waters Treaty* means Canadian provinces and American states, would encourage those actors to behave more responsibly when it comes to transboundary waters and pollution and would give them also

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162 *North American Free Trade Agreement Between the Government of Canada, the Government of Mexico and the Government of the United States*, 17 December 1992, Can TS 1994 No 2, 32 ILM 289 (entered into force 1 January 1994) [*NAFTA*].

163 *Ibid*, art 1102.

164 *Ibid*, art 1103.

165 *Ibid*, arts 1116–1117.

166 *Convention for the Protection of Human Rights and Fundamental Freedoms*, 4 November 1950, 213 UNTS 221 at 223, Eur TS 5 [*ECHR*].

167 *Ibid*, art 25.

more direct responsibilities under international law. This might help prevent controversies like Devils Lake from growing excessively with consequences for the diplomatic relationships between the two countries.

Not every commentator agrees that increasing public participation will "open the floodgates" and create an uncontrollable number of appeals to the Commission.[168] The Commission for Environmental Cooperation ("CEC"), created under the *North American Agreement on Environmental Cooperation*,[169] a side agreement of *NAFTA*, is a frequently cited example. The *NAAEC* contains a citizen petition process, which allows any non-governmental organization or person residing in any of the three countries to submit that one of the parties is failing to effectively enforce its environmental legislation to the Secretariat.[170] The Council can require the Secretariat to provide a factual record, which would contain all the information relevant for an evaluation of the submission.[171] At the end of the process, the Council may, by a two-thirds vote, make the final factual record publicly available.[172] However, these records are not binding and the only way to force a state to comply with its environmental legislation is through a state's claim against another party under the dispute resolution provisions.[173]

Including a public submission process in the *Treaty* appears theoretically possible. While a submission under the *NAAEC* deals with all of the parties' environmental laws, a similar regime under the *Treaty* will likely have fewer submissions due to its narrower scope.[174] However, the CEC and the IJC have a completely different composition and this has political consequences that cannot be underestimated. The Council is comprised of the environment ministers of the member states,[175] but the IJC is composed of Commissioners who are independent and act in the interest of both countries. There is different political control over the two bodies and their decisions. The United States and Canada might view negatively a body that they do not directly control that could

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168 Robert V Wright, "The Boundary Waters Treaty: A Proposed Public Submission Process to Increase Public Participation, Accountability and Access to Justice" (2008) 54 Wayne L Rev 1609 at 1628.

169 *North American Agreement on Environmental Cooperation*, United States, Canada, Mexico, 14 September 1993, 32 ILM 1480 [*NAAEC*].

170 *Ibid*, art 14.

171 *Ibid*, art 15.

172 *Ibid.*

173 Jack I Garvey, "A New Evolution for Fast-Tracking Trade Agreements: Managing Environmental and Labor Standards Through Extraterritorial Regulation" (2000) 5 UCLA J Int'l L & Foreign Aff 1 at 14–15.

174 Wright, *supra* note 168 at 1628.

175 *NAAEC*, *supra* note 169, art 9.

evaluate their projects following the complaint of a private citizen. In particular, if complaints can be filed by people living in another country, the national sovereignty rights limitation is even wider.

Improvement of the functionality of the *Boundary Waters Treaty* can be realized through the quasi-judicial function of the IJC, which approves uses, obstructions or diversions of boundary waters, rivers flowing from boundary waters, or waters flowing across the border, in case these projects will raise the natural level of waters in the upstream country.[176] Although the Red River crosses the border between the United States and Canada, the definition of boundary water in the *Treaty* prevents the IJC from evaluating the Devils Lake outlet project. Requiring the IJC's approval for all projects involving diversions affecting transboundary waters could be the definitive step to attribute a greater role in the development of environmental law in the 21st century to the IJC. Nowadays, the environmental consequences of projects involving inter-basin transfer of waters are known and require more effective and immediate action. Protracted negotiations rarely find a solution and most of the time they take too long. Behaviours threatening the environment are more frequent every day and actions must be taken to prevent damages, rather than merely fixing harmful consequences.

Unfortunately, the solution to the Devils Lake problem cannot be found in the legal system. Existing legal mechanisms can be developed and new ones can be created, but the last word belongs to politics. Canada has lost enthusiasm for international institutions and the United States has always considered international law to be interfering in their interests. In this scenario, it is highly improbable that the two federal governments would agree to modify a bilateral agreement to give more power to an international body like the IJC. Nevertheless, both domestic jurisdiction and bilateral agreements have proven to be inadequate to face the environmental challenges of the 21st century. The relationship between the two countries on shared watercourses should conform to the guidelines set in the 1997 United Nations *Convention*. In particular, the cooperative spirit of the *Convention* should be transferred into the *Treaty*, as it was inspired by the principle of limited territorial sovereignty. This doctrine has a negative connotation and requires states to abstain from certain activities. Instead, the *Convention* has been built on the community of interests approach, which sees the entire watercourse basin as a whole that belongs to all riparian states and requires positive action and a generalized responsibility.

In the case of Devils Lake, and in other similar cases, both the United States and Canada should have behaved in a more cooperative way. The controversy shows a unilateral approach from each country. The United States, and North

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176 *Boundary Waters Treaty*, *supra* note 9, arts III–IV.

Dakota, wanted to solve their problems in the least expensive and fastest way possible. Canada, at least in the beginning, appealed to its rights contained in the *Boundary Waters Treaty* and asked that the Devils Lake waters not cross the border. Instead, the community of interests approach would require that Devils Lake and its flooding should be treated as a matter directly affecting both countries. In particular, states must be more responsible for actions that have transboundary consequences. Following the most recent international law developments in the field of international watercourses, Canada would have had the possibility to be more actively involved from the beginning by proposing and participating in alternative solutions for the flooding in Devils Lake area. International legal instruments should require Canadian authorities to consider an issue like Devils Lake as a problem that directly involves them, since a possible natural overflow of the lake would have devastating effects on the Red River Basin.

V. CONCLUSION

The management of transboundary waters in North America requires a more modern approach, particularly concerning environmental issues. After 100 years, the *Boundary Waters Treaty* is considered by many to be out of step with modern international environmental agreements.[177] In particular, the provisions concerning the prohibition on transboundary pollution contained in the *Treaty* have lost effectiveness and it also lacks the specific tools to allow public participation and access to justice. The deficiencies of the *Treaty* are particularly evident in the controversy between the United States and Canada regarding Devils Lake and its outlet. The decision of North Dakota authorities to build an artificial outlet in order to divert excess water created concerns among people living in Manitoba who worried about the quality of their water. The application of national rules failed to solve the dispute, demonstrating the limits of domestic jurisdiction in the resolution of transboundary issues.

The relationship between the two countries on shared watercourses should embrace the cooperative spirit contained in the 1997 United Nations *Convention*. Many different interests are involved, in particular concerning the environment and the economy. The balance among them can be achieved through a greater and more active participation of Canadian provinces and American states and giving a renewed and more significant role to the IJC.

The solutions proposed in this paper might be a first step towards the modernization of the *Treaty*. Nevertheless, bilateral action and a renewed trust in the IJC are the starting point. In particular, this author considers a more

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[177] Wright, *supra* note 168 at 1609; see also Hall, *supra* note 152 at 1419.

active participation of non-federal actors in the management of international watercourses to be vital. Ultimately, both parties must accept the important role of international law and impartial international institutions if they wish to successfully manage their shared watercourses for the next 100 years.