



THE FIRST CENTURY OF THE INTERNATIONAL JOINT COMMISSION

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The International Joint Commission and Mid-continent Water Issues: The Garrison Diversion, Red River, Devils Lake, and the Northwest Area Water Supply Project

Norman Brandson and Allen Olson

From the Atlantic to the Pacific, Canada–United States water relations have been shaped by the unique geography of the nine principal trans-boundary watersheds subject to the Boundary Waters Treaty (BWT). The states of Minnesota and North Dakota and the province of Manitoba share three of these watersheds: Manitoba and Minnesota (along with Ontario) the Rainy River basin; Manitoba and North Dakota (along with Saskatchewan) the Souris River basin; and all three share the Red River basin. The Red rises at the confluence of the Otter Tail and Bois de Sioux Rivers at the extreme southeast corner of North Dakota. Flowing northward it marks the Minnesota–North Dakota boundary, crossing the international border into Manitoba through the largest city in the basin, Winnipeg, its delta emptying into the south end of Lake Winnipeg. The topography of this northern Great Plains basin is largely tabletop flat, where elevation differences are measured in inches or fractions of inches rather than feet. Minnesota, known as the land of ten thousand lakes, is not generally water deficient; nor is Manitoba, with major rivers flowing



FIGURE 7.1. Map of water issues discussed in this chapter. Used with permission of the Government of Manitoba.

in from both east and west and an abundance of Prairie lakes. However there is a dearth of surface water in that portion of the basin west of the Red in North Dakota.

We will look at four cases in this region that neatly illustrate some of the strengths and weaknesses of both the BWT and the International Joint Commission (IJC), as well as how both the document and the institution are evolving over time. The first case (Garrison Diversion) examines what may be the last serious use of the treaty's dispute-resolution mechanism, an IJC reference to examine a proposed diversion of Missouri River water into the Red and hence the Hudson Bay drainage; an IJC study reference (Red River Flooding) that galvanized action after the largest Red River flood in over a century; and two more recent water disputes (Devils Lake and the Northwest Area Water Supply Project) that could have been referred to the IJC but were dealt with by alternative means.

The authors of this chapter were direct participants in many aspects of these four case studies: Governor Olson was an elected official in North Dakota and Norman Brandson was a senior official in the Manitoba government. Although supporting references are provided for most of the salient points of each case, the authors have called on first-hand experience and personal recollection to paint a full picture.

Garrison Diversion

The dream of building a water system to make productive the rich but arid farmland of eastern North Dakota is over one hundred years old, first mentioned at the state's Constitutional Convention in 1889. Beginning then and down through the years, the source of supply for such a system was seen as the Missouri River; but it really wasn't until the completion of the Garrison dam on the Missouri in 1953, which created the Lake Sakakawea reservoir, that the dream started to shift toward reality. In 1955 North Dakota created the Garrison Diversion Conservancy District,¹ a twenty-five county political subdivision authorized to raise funds to advance a project to divert water from Lake Sakakawea through a series of canals and natural streams to eastern and northern North Dakota. Most of the water was intended for distribution for irrigation but there was also a domestic and municipal component as well as some envisaged fish and

wildlife benefits. It was clear at that time that North Dakota would require substantial federal funding for such a massive project. It was duly forthcoming as Congress authorized in 1965 the construction of the Garrison Diversion Unit (GDU).²

As construction proceeded on various components of the GDU—dependent on annual Congressional appropriations it was clearly going to take several years to fully complete—the Government of Manitoba began to have some concerns that this project would link two continental watersheds that had not been so connected for several millennia.³ Because of their isolation from one another they had developed distinct ecosystems with different and perhaps incompatible species of fish, micro-organisms, fish pathogens, and so forth. There was concern that the return flows from irrigation could wash both artificial (pesticides, fertilizers) and natural (sulfates and other soil constituents) contaminants into the Red River and hence into Canadian waters; perhaps more seriously, these flows, as well as spills and flows from the system's conveyances, could bring damaging organisms not natural to the Red River/Hudson Bay basin, causing irreversible harm to the basin's ecology, in violation of article iv of the BWT.

It appears that the governments of Canada and the United States approached article ix of the BWT—the investigative functions of the IJC—and its use for dispute resolution with some caution. Although an *aide-mémoire* was developed as the basis of discussion between the two governments in 1970, it wasn't until 1975, with construction of GDU works proceeding apace, that it was agreed to refer what had clearly become a "dispute" between Manitoba and North Dakota to the IJC under article ix. Although there are instances of references stretching out over long periods of time, the commission was charged with reporting to the governments within one year, and they did so.⁴

The commission's work, given its tight time deadline, was based on existing information. Several technical teams were assembled with Manitoba, Minnesota, and North Dakota contributing personnel. Their work was directed by the International Garrison Diversion Study Board, established by the commission to provide technical advice. Eight public hearings were held throughout the basin with an accompanying public involvement program, somewhat advanced for its time. The commission considered the implications of the final proposed GDU (some parts of

which had already been constructed) on Canadian waters based on the reports of its technical committees as well as feedback received through its public involvement process. The commissioners made three recommendations to the governments: first, that those parts of the GDU that would convey water into the Red River basin not be built at this time because of the threat of transferring harmful invasive species into Canadian waters; second, that “if and when the governments of Canada and the United States *agree* that methods have been *proven* that will *eliminate the risk* of biota transfer, or if the question of biota transfer is *agreed* to be no longer a matter of concern” (emphasis added) then the portion of the GDU conveying water into the waters flowing into Canada can proceed provided that a number of conditions outlined by the IJC are met; and third, that the two countries negotiate water quality agreements for the Red and Souris Rivers. This latter recommendation was not unanimous. (A separate opinion was filed by one of the Canadian commissioners recommending that the setting of water quality objectives should be extended to all trans-boundary tributaries of the two rivers.) It is the second recommendation that became Manitoba’s mantra whenever it has been faced with potential inter-basin transfers of water into the watershed of the Red.

It is remarkable that the IJC was able to reach consensus rather than simply dividing on national lines, agreeing that a significant portion of the GDU not be built given that this was such a large undertaking backed by the Government of the United States. It is intended that commissioners approach their duties objectively without partisanship and the outcome of the Garrison reference, accepted by the national governments, offers proof that this ideal can actually be achieved in practice. In 1981, in the wake of the IJC report, the US-Canada Consultative Group (CG) of senior officials was established to initiate discussions concerning the conditions that might satisfy the IJC’s second recommendation, and in 1983 a Joint Technical Committee (JTC) was established to assist the CG.⁵ Ultimately the group was unable to agree on the type, location, and degree of water treatment that might satisfy Canadian concerns.

Dreams die hard, however, and the Garrison report—the second recommendation outlined above—did envisage circumstances under which the GDU or some future project to divert Missouri River water into the Red River basin might be acceptable. Less than ten years after the IJC report,

Congress passed the Garrison Diversion Reformulation Act,⁶ which refocused the project on diverting Missouri water into the Red River Valley for municipal, rural, and industrial uses, substantially reducing the irrigation component. Federal funds continued to flow to the Garrison Diversion Conservancy District. Over time further modifications virtually eliminated the irrigation component, and in 2000 Congress authorized under the Dakota Water Resources Act⁷ a “new” project, dropping the name “Garrison Diversion Unit” in favour of the Red River Valley Water Supply Project (RRVWSP), even though the federally funded Garrison Diversion Conservancy District remained (and remains) in existence.

The project would divert Lake Sakakawea water over the divide into the Red River Valley using most of the previously constructed GDU works, but unlike the original project would include measures (unspecified) to eliminate or at least mitigate the risk of invasive species transfer. Much has changed since the 1977 IJC report: massive irrigation projects using imported water have fallen out of favour; there is much more experience and better science concerning invasive species than was available to the IJC in the mid-seventies; water treatment technology has also advanced since then; both national governments seem reluctant to employ article ix of the BWT to resolve disputes, preferring instead ad hoc negotiations that may preserve the principles of the BWT while not formally falling under its provisions; and attitudes in both North Dakota and Manitoba have changed.

In the case of North Dakota the advent of shale oil and gas development has turned a state long dependent on the inflow of federal dollars into an economic powerhouse much more aggressive in solving its water problems without the necessity of federal aid. In Manitoba the emphasis has shifted from “no diversions ever” to insisting that the IJC’s second Garrison recommendation still holds but that it is time to look at ways in which it might be possible to agree on measures for such diversions, as per the work of the CG and the JTC, that might eliminate invasive species risk; and that the IJC can play a useful role, not in “resolving a dispute” but in providing objective technical advice under article ix as it has on many occasions to the benefit of both countries (for example, see other chapters in this volume on Great Lakes water quality and the Columbia River Treaty). Four decades later the Garrison Diversion lives.

As this case illustrates, it is not always easy to reconcile the legitimate water needs of upstream interests with the principle of no harm to downstream neighbours. The BWT has worked, more or less, because the national governments have been able to take the larger view: reign in water aspirations in one basin and realize them in another—the greatest good for the greatest number. However, both countries are federations in which the sub-national governments have their own significant powers and also exert considerable influence on the national government. So when a state or province feels that they have lost, have had their aspirations curtailed because of the BWT, they are not likely to be mollified knowing their fellow citizens in another BWT basin have won. The RRVWSP project continues to be advanced by North Dakota.⁸ Preliminary environmental analyses have been prepared and a detailed design is forthcoming. Having strongly disagreed with the results of the original GDU reference, the state adamantly opposes a future reference on this successor project. Overcoming the zero-sum, win-lose approach that was inadvertently triggered by the 1977 Garrison report will require compromise. It remains to be seen whether or not the BWT and the IJC can play a meaningful role to support compromise in the Red River basin.

Red River

The three largest cities on the Red River—Fargo-Moorhead, Grand Forks—East Grand Forks, and Winnipeg—were all incorporated about the same time (1874–5). For the next seventy-five years, although the Red experienced occasional spring flooding—and was a mere trickle during the drought of the Great Depression—there were no catastrophic basin-wide events. That changed in 1950, when the river spilled over its banks and, because of the valley’s flat terrain, created a flood plain several miles wide. A good portion of the city of Winnipeg was inundated, triggering what is still the largest evacuation in Canadian history, partly due to the coincident flood peak of the Assiniboine River that joins the Red at Winnipeg. This led to the construction of the Greater Winnipeg Floodway, completed in 1968, which is an open channel capable of diverting part of the river around the city.⁹ There were also major valley floods in 1968, 1969, 1978, 1979, 1989, and 1996, although none of the magnitude of the mid-century

event. The 1996 flood caused significant agricultural damage and was followed by a wet summer, leaving the ground saturated; and the winter of 1996–7 saw above-average snowfall in the basin. To complete the perfect storm, warm weather in the basin in early April 1997 was followed by a major snowstorm. The Red River Valley contained far more water than the Red and its tributaries could handle and the resulting April-May flood created a “lake” from upstream of Fargo to the city of Winnipeg that measured 25 miles (40 kilometres) at its widest point. Grand Forks was hardest hit with most of the city under water. In the midst of this tragedy a city block caught fire, destroying eleven buildings and resulting in the iconic image broadcast around the world of flames leaping from buildings partially submerged in floodwater. (The intrepid reporting of the disaster by the *Grand Forks Herald* earned the paper a Pulitzer Prize.) Further upstream, Fargo also experienced severe flooding, as did Moorhead and East Grand Forks on the Minnesota side of the river. Winnipeg was thought to be protected by its floodway, but was spared only by a monumental effort to construct, almost overnight, a defensive wall of dikes to the south and west of the city. Even then, had there been sustained strong south winds or significant rainfall, the city would have been largely inundated. Many farms and rural residences were flooded, as was the town of St. Agathe, Manitoba, when its ring dike failed.¹⁰

Taking stock in the aftermath, it was clear that several things had gone wrong. Flood forecasting had failed to accurately predict the magnitude and timing of the flood peak. Most communities and rural residences did not have permanent protection for a flood of this magnitude. Some permanent works were not well maintained and this resulted in some failures of the temporary diking built on these permanent foundations. And it was now apparent after the numerous post-1950 floods that the probabilities engineers had used to design protective works in the valley no longer applied; we could expect bigger floods more often. The '97 flood became *The Flood of the Century*.

The combined damage on both sides of the border was several billion dollars; personal loss and suffering was incalculable. In the immediate wake of the tragedy the two national governments sent a reference to the IJC instructing it to analyze the root causes of the 1997 flood and make recommendations (an interim report to be filed by 31 December 1997 and

the final report one year later) as to how damage from future major Red River floods could be mitigated. The commission created the International Red River Task Force, composed of experts drawn mostly from North Dakota, Minnesota, and Manitoba, to perform technical analyses; held public hearings and meetings throughout the basin; and consulted with opinion leaders at all levels of the private and public sectors. Seized with a sense of urgency the IJC was able to provide an interim report by year-end, as requested by the governments.¹¹

The IJC made twenty-eight recommendations,¹² and also endorsed almost all of the recommendations of their International Red River Basin Task Force that dealt largely with technical issues. The commission's work focused on several key areas and made recommendations as to how governments should address them. The main themes of the report were as follows. First, the basin was simply not prepared for a flood of this magnitude. Huge disasters—like the inundation of Grand Forks—did occur, but even greater catastrophe, like the flooding of Winnipeg, was avoided by the narrowest of margins; and floods of this magnitude or greater can be anticipated in the future. Second, large-scale water retention in this flat basin is not feasible, and although micro-storage can help, no one solution will adequately address the risk. Third, specific additional protective measures are urgently needed for the basin's largest city, Winnipeg, to increase the level of protection; the same is true for Grand Forks and East Grand Forks, Fargo-Moorhead, and other smaller communities and rural residences. Fourth, inter-jurisdictional co-operation and integration is absolutely essential to anticipate, mitigate, and recover from the next "flood of the century," and the task force provided detailed recommendations on the ways and means to achieve this objective. And finally, governments needed to also prepare the hearts and minds of valley residents, helping them to understand the risk posed by future extreme floods and the necessity to prepare in advance for an event that could occur next year or perhaps a hundred years from now. A few years after the event the memory grows dim.

The most tangible immediate result was that the IJC's report held feet to the fire. In a highly public way it drew attention to the fact that not only was this an unprecedented catastrophe, but it could even have been much worse. Moreover, governments—national, state/provincial,

and local—would have to get their collective act together to avoid future disaster. And the governments took it seriously. They collectively reported on their progress in responding to the commission's recommendations. In the United States, reclamation and recovery on both sides of the river in Grand Forks began even before the floodwaters fully receded and a new permanent diking system was constructed. Flood plain rezoning resulted in many structures being removed from high-risk areas. In Canada, a \$350 million federal-provincial program raised protective dikes for rural communities and rural residences two feet above the 1997 flood level. Another cost-shared \$650 million program expanded the Greater Winnipeg Floodway to provide protection from a one-in-two-hundred-and-fifty-year flood event.

These mitigation measures are without doubt the most visible outcome of the IJC's work. It is clear that funding for the expansion of the Greater Winnipeg Floodway would not have been secured without the highly visible red flag raised by the commission. Much progress was made in mapping the topography of the basin through LIDAR surveys that could detect the small elevation changes that directed the path of floodwaters, necessary knowledge in siting mitigation works. More sophisticated flood forecasting is now in place both in modeling and data collection and sharing. In 2001, as part of its International Watershed Initiative, the IJC replaced its existing engineering-oriented Red River Board with the more fully integrated and inclusive International Red River Board. This board continues to track the progress of government actions. Governments at all levels have improved, or created where they did not exist, disaster preparedness plans.

Much has been accomplished. Preparedness for the next "big one" is significantly better than it was in 1997. Much remains to be done, however.¹³ The dream of institutionalizing a transnational response to flooding in the basin, through the efforts of the IJC's International Red River Board and non-government groups like the Red River Basin Commission, is a few steps closer to reality but still distant. There is co-operation and information sharing through networks of technical staff of the province and two states, but it relies more on individual relationships than formality. The issue of improved and coordinated flood forecasting between the US National Weather Service and the Province of Manitoba was raised by

the IJC in its 1997 report, but there was no follow-up review. In subsequent years the two forecasts have occasionally diverged, sometimes significantly, indicating that more needs to be done.

Very little progress has been made with respect to non-structural mitigation measures. Even though usually accompanied by some form of protection, building, and rebuilding continues in the flood plain in both countries. Some research has gone into creating micro storage of water utilizing road ditches, low-lying areas, and existing wetlands, but very little has materialized on the landscape. Nonetheless, the Red River reference illustrates what the IJC perhaps does best: objective scientific analysis leading to non-partisan recommendations that benefit both countries. The work of the IJC often lays the groundwork for future co-operative action. Each situation is different of course. In the case of the Red River Valley tensions among the jurisdictions on water issues is long standing (Manitoba and Minnesota have generally co-operated in opposition to certain North Dakota water initiatives), and given that flooding is but one dimension of water management, it is unlikely that the institutionalized co-operation achieved on the Great Lakes and Columbia River basins will materialize in the valley anytime soon.

Devils Lake

The 3,810-square-mile Devils Lake watershed is located in the northeastern corner of North Dakota, in the western extremity of the Red River basin. It has no natural outlet. During drought cycles there is virtually no Devils Lake, and in prolonged wet periods a very large lake emerges. Although it has not done so for more than a millennium, it can spill over into the Sheyenne River, a tributary of the Red. Actually, except during the very wettest epochs, there are really two lakes, the larger Devils Lake and the smaller, southerly Stump Lake. When the two merge and continue to rise, spillover to the Red can occur through the west end of Stump Lake into a depression known as Tolna Coulee, and hence into the Sheyenne. This overflow will occur when the lake reaches an elevation of 1,459 feet above sea level (FSL). The lake, at the end of a periodic dry cycle, reached a low point in 1940 of just over 1,400 FSL and then over the next half-century rose some 20 feet. Then, in a mere seventeen years, from 1993 to 2010,

the lake rose another 29 feet!¹⁴ Most of the agricultural development in the basin—this is a very productive region of alluvial soils—took place in the first forty years of the twentieth century, when lake levels were dropping. When wet conditions returned there was extensive drainage of more than 100,000 acres of wetlands in the 1950s.¹⁵ On the relatively flat terrain of the basin, with no outflow, in 2010 the lake reached a peak elevation of 1,452 FSL, submerging tens of thousands of acres of productive farmland, washing over roads, and necessitating extensive diking to protect the city of Devils Lake and the Spirit Lake First Nation. The remedy for this catastrophe, if there was one, was to construct an outlet to this closed basin into the Red River basin via the Sheyenne River.

Aside from the Missouri River reservoirs in southern North Dakota, the state has few lakes of any size. Although the bane of farmers, an expanding Devils Lake has been a boon to the recreation industry. A thriving walleye fishery based on hatchery-raised fingerlings and other water-based activities have attracted large numbers of tourists, injecting about \$20 million a year into the local economy. Nonetheless, the concept of an outlet had widespread support in North Dakota and in the late 1990s the North Dakota State Water Commission (NDSWC) began to promote the idea. The reaction of the Manitoba government, although certainly not unsympathetic to the impact rising lake levels were having in North Dakota, was to alert the Government of Canada that any outlet project would have the potential to negatively affect waters flowing into Canada and therefore was subject to the BWT. Specifically, the concerns centred on water quality and invasive species. Devils Lake water has sulfates, salts, and dissolved solids at levels far in excess of Manitoba water quality objectives. The Devils Lake basin has been isolated from the Red River basin for more than a millennium, and it had been artificially stocked with several fish species raised outside the Red River basin, posing the risk of transfer of non-native organisms into the Red River and Hudson Bay drainages. When Canada raised these concerns with the US State Department in 2002, even though no specific project had been proposed, Canada was presented with a proposal for a joint reference to the IJC to review the “project” and provide advice to the two governments. Canada, properly but in retrospect unwisely, responded that a reference, although

ultimately desirable, was premature as there was no actual project proposal beyond the concept stage to review.¹⁶

When in 2003 the NDSWC rapidly advanced beyond the concept stage and into detailed design—in fact, actually initiating construction—the Government of Canada reiterated its concerns and its opinion that it was now timely, with an actual project to review, for a joint Canada-US reference to the IJC. The State Department's response was that an offer for such a reference had already been made and refused and that it considered that refusal to be final.¹⁷ Such are the intricacies of diplomacy. Nonetheless, Canada continued to insist that the project did fall under the terms of the BWT and therefore unilateral action by a state government in those circumstances was unacceptable.

There ensued several months of negotiations involving North Dakota, Manitoba, and the two national governments aimed at satisfying the principles of the treaty without actually invoking the treaty. North Dakota, no doubt recalling the results of the Garrison reference, was adamant that there be no formal involvement of the IJC, and an intense lobbying effort was mounted by the state to convince federal officials that a reference was unnecessary and impractical. The misinformation that an “average” reference to the IJC took eight years to complete, and that without action natural overflow was “likely” and would result in a catastrophic “wall of water” roaring down the Sheyenne River, seemed persuasive. North Dakota's not unreasonable position was that this was an emergency that could only be responded to by diverting water from Devils Lake into the Red River basin. Manitoba's not unreasonable position was that a Devils Lake diversion had potential to harm Canadian waters in several ways, and should not proceed until reviewed by a neutral third party—in this case the IJC—who could determine what was required to safeguard those waters.

The result of these negotiations to develop a process was that the president's Council on Environmental Quality (CEQ), an organization established under the US National Environmental Policy Act and appointed by the president, would oversee negotiations aimed at resolving the divergent positions of Manitoba and North Dakota. As much as possible these negotiations would be led by the sub-national governments, although both Canada and the United States would play strong supporting roles. The role of the IJC was to manage a program to determine whether or not specific

organisms could be identified in Devils Lake that were not present in the Red River or Lake Winnipeg, and the implications, if any, for Manitoba waters if such organisms were found. Since it was made clear at the outset that an outlet project would proceed regardless of the outcome of the CEQ-led process, negotiations focused on mitigation. On 5 August 2005, a joint Canada-US news release announced the following results:

- North Dakota will install before diversion startup a rock and gravel filter and Canada and the United States will co-operate in the design and construction of a more advanced filtration or disinfection system;
- The IJC's Red River Board will develop a shared risk-management strategy for the Red River basin for water quality and invasive species (given that this matter was being considered outside of the BWT the involvement of the IJC was unusual);
- North Dakota agrees that "it does not have such a current intention" to construct diversion of Missouri River water into Devils Lake to stabilize levels if they should drop dramatically in the future;
- And rapid bio-assessment testing will be conducted to confirm that invasive species foreign to the Red River basin are not present in Devils Lake.¹⁸

The news release characterized these results as "a triumph for diplomacy."¹⁹ The project being constructed, and the subject of the negotiations, was an outlet from the west side of Devils Lake with a capacity of 100 cubic feet per second (cfs). Several months later North Dakota, without any further consultation or negotiation, increased the capacity to 250 cfs.²⁰ At the same time the state set in motion plans to construct a second outlet (350 cfs) from an eastern portion of the lake, more than doubling again the inflow to the Sheyenne River.²¹ Even before completion of the west outlet residents along the Sheyenne opposed to the outlet ("Save the Sheyenne") initiated legal action against the project on the basis

that sulfate levels in Devils Lake water exceeded the state's own limits and would therefore pollute the Sheyenne. Manitoba joined in this action. The North Dakota Department of Health then raised those limits. When the new limits proved inadequate for the increased capacity of the two outlets the state again set new numbers, more than doubling the sulfate limit over the original standard.²² The first spring operation of the rock and gravel "temporary" filter on the west outlet resulted in the release of several small fish from Devils Lake into the Sheyenne River;²³ no action was ever taken to replace it with more advanced filtration. Again unilaterally, local authorities excavated the upper end of the Tolna Coulee so that "natural" overflow into the Sheyenne would occur at a lower level. When Manitoba raised concerns that this was neither in the spirit or the letter of the agreement reached in August 2005, a State Department representative replied that there was no "agreement," only a news release.²⁴ In a measure of how seriously the Government of Canada took this issue, samples from the invasive species survey languished in a federal laboratory for two years before adverse publicity forced action. Yet even today this process is portrayed in many quarters as a success, a model to be followed in the future.

There were many flaws in the Devils Lake negotiating process. First the CEQ is a political body and hardly a disinterested one. The founding principle of the BWT, and a factor in its success for both Canada and the United States, is that the two countries come to the table as equals and the IJC can provide objective advice, so valuable when seemingly irreconcilable local interests collide. Second, the process was without discipline, the result being a mere news release not apparently binding on the participants. Third, the very nature of any negotiating process usually involves inequality—inequality of resources, or information, or leverage. In this case it was the inequality of geography. Because water flows downhill the upstream jurisdiction, in the absence of restraint, could do as it pleased while the downstream jurisdiction could do nothing in response.

The tragedy here was not that there were negotiations rather than formal recourse to the BWT. It is inevitable that negotiation will take the place of dispute resolution under the treaty, and that has in fact been the case for some time. Nor was it the fact that North Dakota acted unilaterally to construct, expand, and operate projects with potential transboundary impacts. It was inevitable given the desperate situation, the animosity

created by the Garrison Diversion reference, and the lack of discipline in the negotiating process. Something had to be done. But had there been more clarity, North Dakota's intentions could have been discussed in the negotiations and when the state proceeded—and that was inevitable—it might have been with a more co-operative and less embittered Manitoba. Nonetheless, what many consider a deeply flawed process has attracted partisans. The US State Department, perhaps because a negotiating process potentially offers more leverage than the dispute-resolution mechanism under the BWT, has offered this as a model for resolving future issues. Officials of the state of North Dakota have certainly been satisfied with the results.

This is as clear an example as one could find of irreconcilable interests. Whether or not any outlet or combination of outlets could “solve” Devils Lake flooding (and the Government of Manitoba contended that it could not) was irrelevant. In a situation where a significant number of citizens (there are 22,000 in the Devils Lake basin) are suffering harm, it is not an option for a democratically elected government to say, “We can’t do anything.” Action is required. No one argued that there was no potential for harm to Manitoba waters but, as the North Dakota government argued, the probability of harm was vanishingly small while the necessity to act was overwhelming; and the Manitoba government countered that the risk was finite and if it occurred the harm could be catastrophic. North Dakota was getting the benefits, while Manitoba was assuming the risk, however large or small. Neither position is unreasonable.

Could a more formal process under the BWT have produced a different result? It is inconceivable, given the distrust of such a process in North Dakota and given the very strong influence of both the state government and the North Dakota Congressional delegation in Washington, that agreement could have been reached on an IJC reference once the project had momentum since the political climate that favoured it in 2002 had passed. And what would a better result have looked like? An outlet to attempt to relieve the Devils Lake flooding was going to be built and Manitoba and Canada should have realized it at a much earlier stage. Had they done so some form of IJC involvement might have been possible (evidenced by the State Department's 2002 offer), thus preserving the integrity of the treaty. It may have resulted in a more systematic approach that incorporated at

least some measures to reduce the risk to Canadian waters. Even more importantly it might have diffused some of the tension surrounding water issues that has plagued relations between North Dakota and Manitoba for several decades. Ironically, after the passage of more than a decade, neither jurisdiction's hopes and fears have been realized, at least not yet. As of this writing (2019) the lake level stood at just under 1,450 FSL, much as it was in 2010.²⁵ The outlets have managed to marginally reduce the level of the lake but have suffered operational constraints because of channel capacity and water quality concerns in the Sheyenne River. And the potential downstream disaster feared by Manitoba (the IJC technical study was able to demonstrate that parasites and pathogens harmful to Manitoba waters were not detectable in Devils Lake) has failed to materialize. But the enmity remains.

Northwest Area Water Supply Project

A number of small communities in the northwest quadrant of North Dakota draw their water supplies from groundwater. The quality of this water has never been particularly good, and although not a health concern, some parameters regularly exceed US Environmental Protection Agency drinking water standards. The Garrison Diversion vision of the mid-1970s included a project to divert Missouri River water to Minot, from where it would be distributed to these rural North Dakota communities. The project was included in both the 1986 Garrison Diversion Unit Reformulation Act and the 2000 Dakota Water Resources Act (DWRA) under the name of the Northwest Area Water Supply Project (NAWS). The Joint Technical Committee (JTC) established by the US-Canada Consultative Group (CG) following up the IJC Garrison report, had for several years been examining issues related to inter-basin water transfers, including the NAWS project, and unfortunately by 1999 the two countries had come to an impasse regarding what constituted adequate filtration and treatment of water prior to its transfer from the Missouri to the Hudson Bay basin. In 2001 as authorized under the DWRA, the US Bureau of Reclamation finalized plans for the NAWS project that did not include the water treatment recommended by the Canadian Section of the JTC (or in fact any water treatment) and subsequently obtained a declaration from the US secretary

of state—without consultation with the Government of Canada—that the project as presented complied with the BWT. The bureau then released a final Environmental Impact Statement (EIS) as required under the US National Environmental Policy Act (NEPA), followed by a Finding of No Significant Impact that was appealed by both Canada and Manitoba as permitted under the bureau's NEPA process.²⁶ The appeals were rejected and construction of the first phase of the project, working back from Minot, was completed in 2002.

At this point it appeared that a situation had arisen not envisaged in the BWT. One government had declared that a project complied with the treaty while the other claimed it did not—and the former was unwilling to discuss the matter. The Government of Manitoba decided that if the treaty was not the vehicle for serious consideration of its concerns then perhaps NEPA was, and subsequently filed a legal challenge to the project in US District Court in Washington, DC, in October 2002.²⁷ Subsequently the Government of Canada, the US National Wildlife Federation, the Minnesota Center for Environmental Advocacy, the Missouri Coalition for the Environment, the Minnesota Conservation Foundation, and the South Dakota Wildlife Federation all filed memoranda as *Amici Curiae* in support of Manitoba's position.

The essence of the challenge was that the project clearly fell under the terms of the BWT (admitted in the declaration of the US secretary of state that the project complied with the BWT), thus the bureau was obligated to include possible effects in Canada as part of the project EIS. Moreover, legal precedent established that an EIS under NEPA must include consideration of alternatives to the preferred project, and that the bureau's EIS was deficient in these regards. Therefore an injunction halting further construction was sought until these deficiencies have been remedied.

In 2005 District Court Judge Collyer ruled that the bureau's EIS was indeed deficient in those respects raised by Manitoba and issued an injunction against any further construction on any portion of the NAWS project associated with diverting Missouri River water across the basin divide.²⁸ After further legal process the bureau filed an amended EIS that Manitoba again asserted did not address the specifics of potential harm to Canadian waters in any substantial way, nor did it present a credible analysis of alternatives. In 2010 Judge Collyer again ruled against the bureau.²⁹

This unprecedented intervention by Manitoba in a US domestic legal process was never intended to permanently stop the project. Rather it was to gain legal recognition of the point that if a project in the US portion of one of the boundary waters basins has potential for impacting Canadian waters then an assessment of that potential is required and that assessment needs to be science based and not simply a pro forma and unilateral declaration, as was the case with NAWS. It was also the hope that such an assessment would point to the need for the degree of water treatment that the Canadian Section of the JTC had put forward as satisfying the second recommendation of the IJC Garrison report of 1977. NEPA does not provide the authority to either approve or reject projects. Once the procedural requirements of the act are met then the federal agency responsible for the project makes the final decision on whether or not to proceed. It is clear that at some point the Bureau of Reclamation will meet the NEPA requirements and that it most certainly will then complete the project. In fact, although the legal process is not yet complete, a 2017 decision by the US District Court does give that clearance pending appeals. (Subsequently the Bureau of Reclamation and the Province of Manitoba signed a memorandum of understanding. The province will not pursue further legal action; the project will proceed with water treatment at source and at Minot; the bureau will include Manitoba as an advisory participant in project operation.)

At the end of all of this, at least fifteen years will have passed since the first phase of the project was constructed. It remains to be seen whether or not the installed treatment will meet the standards endorsed by Canada, although it is clear that there will be significantly more attention paid to reducing risks to Canadian waters than was the case for the original NAWS design. And the US Federal Court has laid down a significant precedent respecting the need to perform a legitimate assessment of project impacts in Canada in transboundary basins. In the meantime, the drinking water quality of several North Dakota communities continues to be sub-standard. Legal fees and increasing project costs due to the construction delay probably exceed the cost of even the most expensive water treatment. Had the IJC been called upon by the national governments to provide advice on this matter at the outset, there is little doubt that these communities would have been enjoying NAWS water for a decade or more. The question

of whether or not the commission would have recommended the degree of treatment desired by Canada is moot, but in any event its recommendations would have been compelling and, given past experience, likely accepted by the governments. Court is the last resort and the last place you want to resolve water disputes.

Conclusion

These four cases—the use of article ix of the BWT to resolve a dispute; the use of the IJC’s highly credible investigative and advisory role to help sustain government action to respond to a disaster; and two cases in which the IJC might have played a prominent role but instead were dealt with by other means with results that seem to have deepened the discord between Manitoba and North Dakota—can present a rather negative picture of cross-border water relations. One might infer that the BWT and the role of the IJC under the treaty is in decline in this region. That would be misleading. Minnesota, North Dakota, and Manitoba continue to work co-operatively on the International Red River Board, one of the more successful IJC watershed boards. Water quality objectives are in place and monitored at the border; an early warning system for notifying all parties of any potential water quality impacts has functioned successfully for many years; the three jurisdictions have agreed on a nutrient reduction target; and the jurisdictions work closely with stakeholders in the province and both states. In short, the working relationship between operational personnel is excellent. On the Souris River that flows into the Red through the Assiniboine, a 1948 IJC reference resulted in a departure from the normal “50/50” formula for sharing water. The commission recommended that North Dakota be required to pass at least 20 cfs flow to Manitoba in open water season except during periods of “drought” when the state is not required to pass any flow. This “interim” measure has been operative since 1952. Although this seemed to favour North Dakota it really reflected the erratic flow regime of the Souris. In spite of the wide degree of discretion in determining drought conditions the province and the state have been able to co-operate in managing the Souris without friction. In the late 1980s North Dakota cost-shared (with the US Army Corps of Engineers and the Province of Saskatchewan) water storage on the Souris in Saskatchewan

to reduce flood risk to the downstream city of Minot. Since this impacted the river in both countries an international agreement was required, and Manitoba and North Dakota participated in negotiations led by the US Army Corps of Engineers that resulted in an agreement satisfactory to all parties. Ongoing co-operative management of the Souris continues through the IJC's International Souris River Board.

These workaday operations under the BWT are sometimes overshadowed by the more newsworthy “conflicts” that arise from time to time, but they should not be forgotten. The conflicts are dictated by geography—Manitoba literally, and uniquely, downstream from everyone; North Dakota with abundant water on its southern border that is isolated by the Missouri-Red drainage divide from the arid remaining two-thirds of the state; and Minnesota, whose water interests tend to focus to the northeast (Lake Superior and Rainy River–Lake of the Woods) and south (Mississippi)—and that won't change. What remains to be seen is whether the BWT and the IJC will in the future be confined to a more restrictive operational niche or whether they can also play a meaningful role in the evolving process of transboundary water negotiations.

Notes

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- 28 Ibid.
- 29 *Government of the Province of Manitoba v. Norton*, 691 F. Supp. 2d (DDC 2018).

