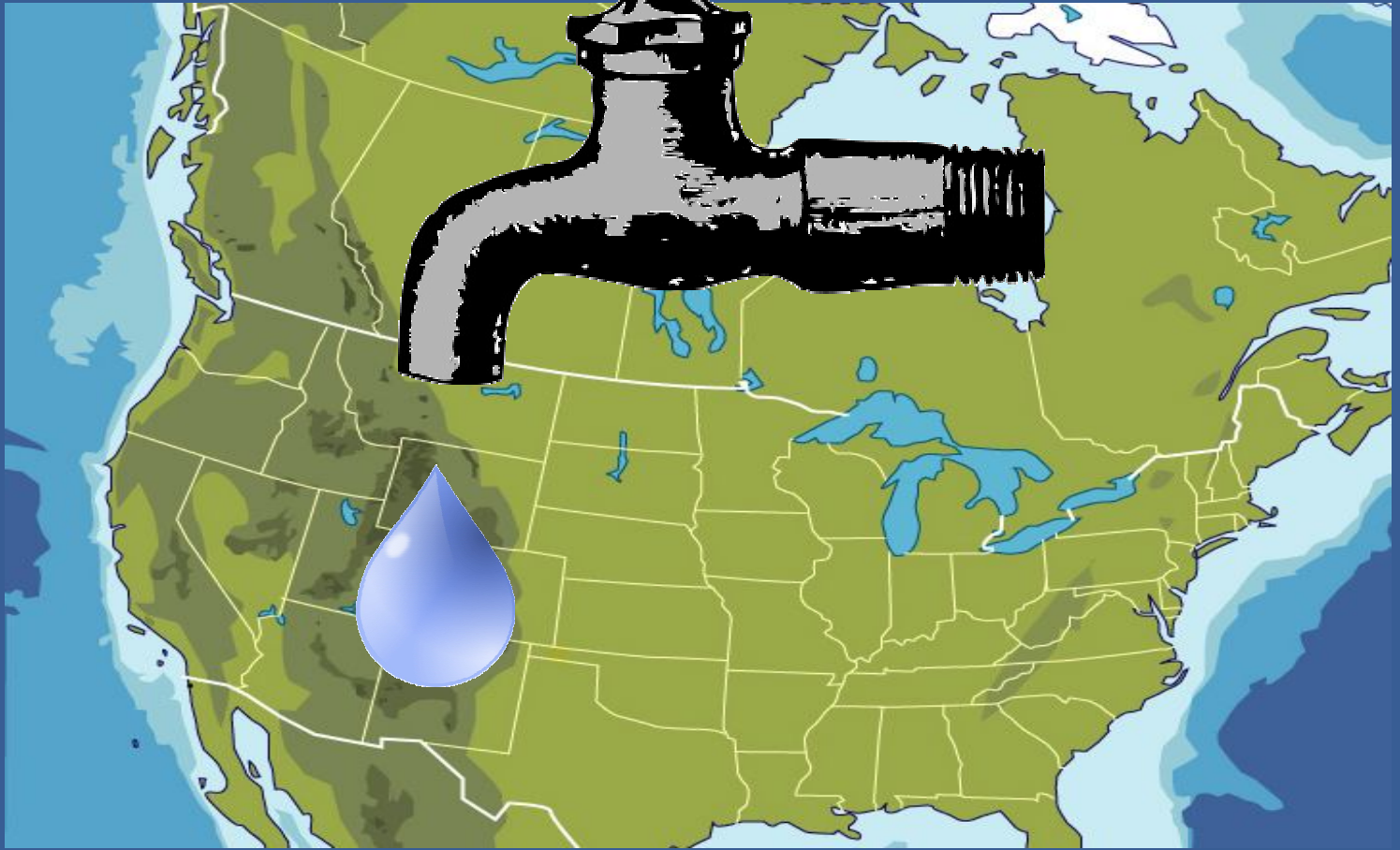


# Turning on Canada's Tap?



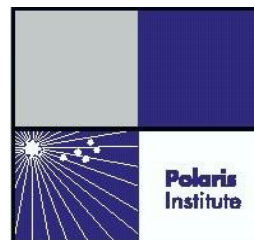
## Why We Need a Pan Canadian Policy and Strategy Now on Bulk Water Exports to the US

*by Tony Clarke, Polaris Institute*

Prime Minister Stephen Harper had promised Canadians in the last Throne Speech [October 21, 2007] that his government would bring forth a 'national water strategy.' But the Harper Government's budget of February 26, 2008 contained no provisions for a federal water program and strategy. Meanwhile, the prospects of bulk water exports to the United States continue to be a hot policy issue simmering just below the surface on Parliament Hill.

In April 2007, people in Canada awoke to news reports that "water transfers" to the U.S. were on the agenda of a closed door meeting in Calgary of the North American Future 2025 Project --- an officially

sanctioned body of high level business personnel established to advise the political leaders of Canada, Mexico and the U.S. on agenda items to be dealt with under their Security and Prosperity Partnership [SPP]. Highlighting the emerging problems of water scarcity in the U.S. [and also Mexico], the business advisors proposed the option of developing regional agreements "on issues such as water



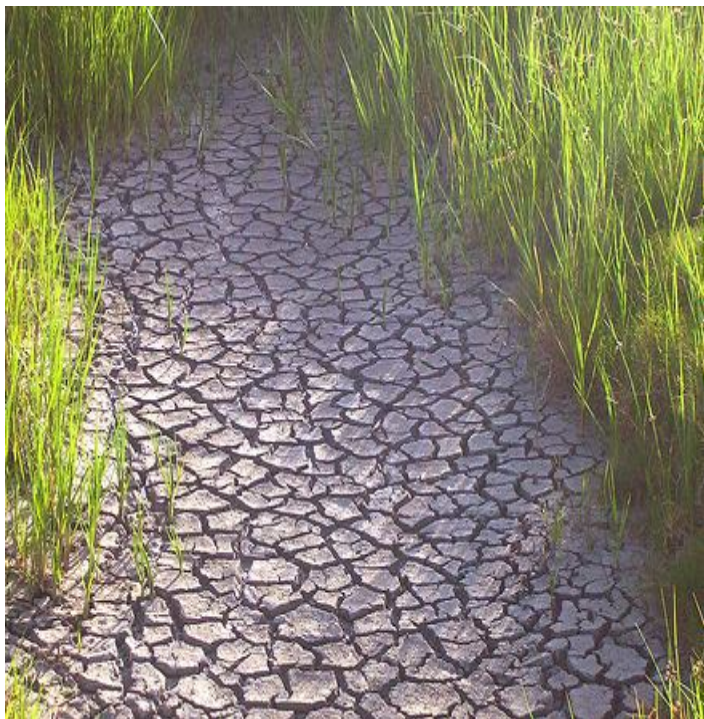
### **A Polaris Institute Report**

Issued in collaboration with the following organizations:

- **Canadian Centre for Policy Alternatives**
- **Canadian Labour Congress**
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consumption, water transfers, artificial divisions of freshwater ...” Less than two months later, the House of Commons voted 134 to 108 on a resolution, June 5, 2007, calling on the federal government to “quickly begin talks with its American and Mexican counterparts to exclude water from the scope of NAFTA.”

Historically speaking, there is nothing new about this public policy debate. For half a century or more, people in Canada have expressed fears that the U.S. is coming after ‘our water.’ In the early 1960’s, public opposition to large scale water exports to the U.S. erupted when it became known that private companies were developing plans for massive water diversion projects like the North American Water and Power Authority and the GRAND Canal. Two decades later, public anxiety about bulk water exports surfaced again during the Inquiry on a National Water Policy which, in 1985, set the stage for the Canada Water Preservation Bill in 1987, effectively banning bulk water exports. Ironically, however, the proposed water legislation died on the order paper with the dissolution of Parliament for the 1988 election on free trade.



Under the U.S. presidency of George W. Bush, the issue has taken on a unique twist of its own. Shortly after he was sworn into office, President Bush spoke to reporters about the growing problems of water scarcity in his home state of Texas and announced he would take up the issue with then Prime Minister Jean Chretien. While Canadian officials were quick to

publicly reject Bush’s overture, the signal had been given. Throughout the Bush administration, this signal has been kept alive, notably by the previous U.S. Ambassador to Canada, Paul Celucci, who gently but constantly chided Canadians in speeches about their public attitudes towards water which, from his perspective, should be viewed as another commodity like oil to be sold and exported.

In Canada, we have a social and ecological responsibility to be water guardians by defending and protecting the freshwater systems that lie north of the 49<sup>th</sup> parallel. However, it is highly doubtful that the Harper government or, for that matter any federal government, is going to take the kind of bold leadership required on this issue, without a great deal of public pressure from people across the country.

### **America’s Water Crisis**

In Canada these days, there tends to be a fair amount of loose talk about the U.S. water crisis. While water shortages certainly exist here and there across the U.S., in some cases very serious ones, it’s important to probe a little deeper. When it comes to water supplies, for instance, people in this country may be surprised to learn that the U.S. is one of the most endowed countries on the planet. Here, we are not talking about surface water supplies like lakes but, more importantly, renewable water supplies which have to do with the amount of water flows and groundwater recharge that exists within the borders of a given country. In terms of renewable water supplies, the U.S. is ranked fourth in the world, one-tenth of a percentage point behind Canada.

To grasp the realities of the looming US water crisis, we need to look at how urban and regional demands for water are outstripping local sources and supplies. In the U.S. today, the vast majority of the population - --almost 80 percent--- live in cities and the watersheds of the American city are depleting. Surveys are showing that in an increasing number of cities, there are signs that the traditional water sources which urban areas depend on are either drying up or becoming so contaminated that new water sources have to be found. According to the Urban Water Council, 24 percent of America’s medium sized cities and 17.3 percent of its large cities are expected to face serious water shortages by 2015.

The problem of US water shortages becomes even more disturbing when viewed on a region by region

basis. In particular, there are three major regions of rapidly growing water shortages.

Southwest States: the fastest growing region in the US is already dry and must pump water in from elsewhere. In Arizona, the city of Tucson has part of its water supplies pumped in from the Colorado while in the city of Phoenix, which is growing at a rate of one acre per hour, water tables have reportedly dropped by as much as 120 metres in the eastern section. In California, the water table under the San Joaquin Valley has dropped nearly ten metres in some areas in the past fifty years while overuse of ground water in the Central Valley has resulted in a loss of over 40 percent of the storage capacity in California's reservoirs. Similar trends show water shortages are intensifying in New Mexico, Texas, Nevada and Utah.

Midwest States: the farm belt of the US faces a lethal combination of droughts and dried up wells. Here, the Ogallala [or High Plains] aquifer located under some 8 states, the largest single underground body of water or aquifer in all of North America, which irrigates 8.2 million acres of farm land, is being drained at a rate that is 14 times faster than nature can restore it. Half the Ogallala water is now gone. In metro Chicago, studies now warn that water demands will rise another 30 percent by 2025, thereby requiring a major escalation of bulk water transfers from Lake Michigan. And, in 2004, half of Kentucky's 120 counties had water shortages.

Southeast States: continue to encounter growing water shortages. The Florida aquifer system, which covers some 200,000 square kilometers, is currently being mined at a rate that is far faster than it can be naturally replenished. Indeed, the water table has dropped so low in Florida that seawater is now said to be invading its aquifers. Recently plagued by periodic droughts, a 'water war' is emerging in the region as Florida, Alabama, and Georgia struggle for access to,

and control over, limited water supplies. As the city of Atlanta runs out of drinking water and turns to sources like the Tennessee River to solve its problems, neighboring states are vigorously objecting to these kinds of inter-basin transfers.

To be sure, significant progress has been made in water conservation. Over the last 25 years, many US states and cities have begun to introduce programs and measures designed to encourage conservation pricing, conjunctive use of ground and surface water, waste water recycling, rainwater harvesting, drip irrigation, and leak reduction methods. But, this is not enough to stem the tide.

### **Canadian Water Sources**

In the eyes of most Americans, Canada is seen as that "great, green sponge" up-North. Most maps of Canada are dotted with blotches of blue, marking numerous interconnected lakes and rivers. Yet, the topography of this country is such that we have a few very large lakes combined with a great many small lakes and, given a relatively cool climate, there is also a low rate of evaporation. Moreover, even being endowed with many lakes and rivers does not mean that Canada has a rich abundant supply of available fresh water.

Although Canada may contain as much as 20 percent of the world's lake water, this is not the same as renewable supplies of water. If water is continuously drained from a lake, it will eventually dry up. Lake water, in other words, is essentially non-renewable. However, renewable supply is water that falls from the sky in the form of rain and snow, and then runs off in rivers, streams and underground aquifers. It also includes groundwater because, as rainfall water seeps into the ground filling up aquifers, the excess water is drained through springs which run into streams.

According to the World Resources Institute, Canada is ranked third in the world in terms of renewable water supply with 6.5 percent [behind Brazil at 12.4 and Russia at 10 percent]. Actually, Canada is virtually in a tie with three other countries --- Indonesia, the US, and China --- each with 6.4 percent of renewable water supplies. But, Canada's 6.5 percent of renewable water is also misleading. Approximately, 60 percent of this country's rivers flow northward into the Arctic and northern territories, away from where the vast majority of Canadians live and work.

As a result, it is estimated that Canada's real portion of the world's freshwater supplies is 2.6 rather than

**"It is estimated that Canada's real portion of the world's renewable freshwater supplies is 2.6 rather than 6.5 percent."**

6.5 percent. The US, therefore, has around 2 ½ times the amount of renewable freshwater supplies as Canada for most of its population. And, even when the Alaskan portion of the total US freshwater supply is excluded, the 48 contiguous states of the mainland still have 1 ½ times the amount of renewable freshwater as does the southern half of Canada. Of course, this renewable water supply is for animal and plant life as well as human use. What's more, the US population is nearly 10 times that of Canada. On top of this, scientists are warning that global



warming will have a significant impact in reducing Canada's supplies of renewable freshwater. According to recent University of Alberta studies, the Prairies are already drying up: the South Saskatchewan River has declined 80 percent, the Old Man and Peace Rivers are down 40 percent, while the Athabasca River has dropped by 30 percent. What's more, a glacier meltdown due to global warming will most certainly accelerate these trends. Meanwhile, Canada's wetlands, which play a vital role in the regeneration of freshwater, are vanishing at an alarming rate. Almost a decade ago, the Canadian Wildlife Federation warned that Canada's wetlands, which have traditionally covered only 14 percent of this country's land mass, have been mostly destroyed by urban sprawl and large-scale farming.

Moreover, when it comes to the prospect of bulk water exports, there are mounting concerns about the ecological dangers of large-scale extractions from water basins. To date, there is sufficient evidence that draining massive amounts of water from lake and river basins disrupts local ecosystems, damages

natural habitat, reduces biodiversity, and dries up aquifers and underground water systems. During inter-basin transfers, parasites, bacteria, viruses, fish and plants from one water body would be carried into another. Mercury contamination from the flooding required for water diversions would bio-accumulate in the tissues of mammals, thereby having damaging effects along the food chain. Large-scale structures required for the storage of exported water would also disrupt ecosystems in remote areas.

In short, Canada's reputation as a water rich nation is somewhat misleading and bears rethinking in the light of mounting US freshwater demands. Unbeknown to most people, for example, vast amounts of water are diverted from the Hudson Bay Basin into Lake Superior, by two hydro dams [the Ogoki and Long Lac], in order to compensate for water diverted through the Chicago canal to Lake Mississippi. At the same time, the growing water stress on the eco-system south of the border is bound to have its own impacts on Canada's water sources.

### **Water Export Corridors**

The idea of selling Canadian water to the U.S. is certainly not new. The call for bulk water exports from Canada to the U.S. dates back to the 1960s. It is often forgotten that the precedent for bulk water exports was set back then with the signing of the Columbia River Treaty between Canada and the U.S. in 1969.

Indeed, the origins of the Columbia River Treaty date back to a conflict between Arizona and California over water takings from the Colorado River which, in turn, prompted the 1963 U.S. Supreme Court ruling that a limit be placed on the volume of water withdrawals from the Colorado. Later, the void was filled by water flows from the Columbia. For almost forty years now, the Columbia River, which originates in British Columbia and is fed by water run-offs from the Rocky Mountains, has been providing the American southwest with a steady supply of water from Canada.

In order to offset its impending water shortage crisis today, the US has at least two major options within its own borders. One is to tap the Great Lakes for bulk water diversion, namely, Lake Michigan [the only one of the seven within US borders], which would call for an expansion of the Chicago Diversion Plan originally grandfathered into the Boundary Waters Treaty between Canada and the US. The other option is to transport water from Alaska either by supertankers

down the treacherous waterways of the Pacific Northwest coast or through an undersea pipeline along the Pacific shoreline.

Since the International Joint Commission has firmly rejected any further bulk water diversions from Great Lakes and the Alaska option may prove to be too costly or unpredictable, there is the third option of Canadian bulk water exports. Since the 1960's, three mega-water corridor plans have been promoted.

Western Corridor: Originally, the North American Water and Power Alliance [NAWAPA] was designed to bring bulk water from Alaska and northern British Columbia for delivery to 35 U.S. States. By building a series of large dams, the northward flow of the Yukon, Peace, Liard and a host of other rivers would be reversed to move southward and pumped into the Rocky Mountain Trench where the water would be trapped in a giant reservoir and then pumped through a canal transporting the water southward into Washington state and 34 other states.

Central Corridor: A set of water diversion schemes, named the Central North American Water Project [CeNAWAP], calls for a series of canals and pumping stations linking Great Bear Lake and Great Slave Lake in the NWT to Lake Athabasca and Lake Winnipeg and then the Great Lakes for bulk water



exports to the U.S. There are several variations of the CeNAWAP linking various rivers for the same ends, such is the Kuiper Diversion Scheme and the Magnum Diversion Project diverting water through similar river systems into the Souris River in the US.

Eastern Corridor: Known as the GRAND Canal Scheme [Great Recycling And Northern Development Canal], plans called for the damming and rerouting of northern river systems in Quebec in order to bring freshwater through canals down into the Great Lakes where it would be flushed into the American Midwest and the Sunbelt states. A dike would be built across James Bay at the mouth of Hudson Bay [whose natural flow is northward], thereby turning the bay into a giant fresh water reservoir fed by the 20 rivers that flow into it.

At the time, there was strong public opposition in Canada to these bulk water export schemes. Yet, there was also political support. The GRAND Canal scheme, for example, enjoyed the backing of then Quebec Premier Robert Bourassa and then Prime Minister Brian Mulroney. Even so, neither of these mega projects has come to pass. The reasons include lingering problems over their economic feasibility, conflicting political jurisdictions and disturbing environmental impacts. But, none of these massive water diversion and export schemes could be realized unless the US demand and thirst was acute enough. That picture, as we have seen, is now changing dramatically.

### **Water Policy Quagmire**

It is not at all clear that either Ottawa or the provinces are in a position to deal with a challenge coming from Washington to turn on the taps for Canadian bulk water exports to the US. Nor is it clear what would be done by our federal or provincial governments if a water corporation or consortium of companies were to propose extracting and transporting water in bulk form from a Canadian lake, river or aquifer to the US. Simply put, there is a serious deficiency in terms of Canadian water policy and governance. What's more, to deal with this challenge means disentangling a thorny set of problems.

Any Canadian plan governing bulk water exports would require cooperation and concerted action on the part of both federal and provincial governments. Under the Canadian Constitution, the provinces have the authority and powers to govern natural resources,

including water, that lie within their jurisdiction, whereas the federal government has responsibility for governing matters of international trade and foreign policy. Moreover, the Boundary Waters Treaty of 1909, coupled with the studies and judgments rendered by the international Joint Commission, provide a framework for water governance concerning Canada and the United States.

Twenty years ago, Ottawa came close to developing a bulk water export policy and strategy. In the mid 1980s, the federal Inquiry on a National Water Policy heard widespread public opposition to large scale water exports. In 1987, the Mulroney government tabled its Canada Water Preservation Bill declaring: "The federal government will take all possible measures within the limits of its constitutional authority to prohibit the export of Canadian water by inter-basin diversions and strengthen federal legislation to the extent necessary to fully implement this policy."



But, the Canada Water preservation Bill was short lived. It was allowed to die on the order paper as the writs were dropped for the 1988 election on free trade. In retrospect, the Bill may have been more of a political ploy to dampen mounting resistance to the Mulroney government's free trade deal. Had it become law, the U.S. would have had sufficient grounds to strike it down as a violation of the new agreement. The new trade implications became clear a decade later when the Ontario government granted the Nova Corporation a permit to extract water from Lake

Superior for bulk water exports. Although, after a public outcry, Ontario rescinded the permit, the trade trap had been uncorked.

Canada's obligations under both the WTO and the NAFTA impose strict limits on our abilities to exercise sovereignty over water exports. Under Article 11 of the GATT [now the WTO rules] the use of quantitative export controls, such as a ban or embargo, on any product 'destined for the territory of any other contracting party' is prohibited. While Canada could impose a tax or duty for water conservation purposes under the WTO, it surrendered this option in regards to exports of natural resources to the US under NAFTA. What's more, the 'proportionality clause' of NAFTA, makes it clear that once Canada starts to export water it cannot reduce its exports below the average of the previous three years. In other words, once the water tap has been turned on it stays on.

In addition, federal and provincial governments experienced the chill of possibly being sued by a water corporation under chapter 11 of NAFTA. Handcuffed by NAFTA and the new international trade rules, the Chretien government decided to shift strategy and abandon its call for an outright ban on bulk water exports. Instead, Ottawa began to develop an environmental approach to the issue of water sovereignty by asserting its right to protect 'water in its natural state' and prevent the 'bulk removal of water' from major water basins. And, instead of legislating a federal ban which would contravene new trade rules, Ottawa made an accord with the provinces to prevent water exports.

But, the water export accord has little or no effect without federal legislation, simply because it's Ottawa that has constitutional jurisdiction over trade and exports. Without the backing of federal legislation, the accord is toothless. On top of this, the Canadian government no longer has the capacity to adequately monitor the country's water sources and enforce existing water laws. Financial cutbacks have drastically reduced Environment Canada's ability to be the country's water watchdog.

### **Water Security Agenda**

It's high time that Canada developed a clear policy and strategy on bulk water exports as part of a comprehensive water security program. During the past twenty years since the Canada Water Preservation Bill, little has been done to develop

effective federal legislation and a cogent plan of action on this front. Before the U.S. demands for freshwater reach a crisis point, it's imperative that the Canadian government be in solid position to respond with effectiveness. Public opinion polls have consistently shown that most people in Canada expect action from their governments on this issue. What seems to be missing is the political will to provide firm leadership. The following is a five step agenda designed to move in this direction.

**1. Rebuild Canada's Water Protection Capacities:**

Ottawa needs to immediately establish water protection as a high priority and to earmark substantial new funds for government capacity building purposes in the next and succeeding federal budgets. The water protection capacities of Environment Canada and related departments must be strengthened for the expressed purpose of: analyzing existing surface and groundwater sources across the country; assessing water stress areas and water diversion schemes that may emerge; develop a rapid response mechanism with provincial counterparts to deal with hot spot issues; negotiating firmly with Washington and U.S. states over demands for bulk water exports; and build support in other political jurisdictions.

**2. Establish a Federal Ban on Bulk Water Exports:**

To be effective, the basic rationale for the ban should be rooted in sound ecological arguments. The objective of 'protecting water in its natural state' and preventing environmental damage being done to water basins through bulk water removals, are sound environmental grounds for banning water exports. Under international trade law, these kinds of ecological objectives are recognized by Article XX of the World Trade Organization as grounds for exemption from global trade rules for environmental reasons. A federally legislated ban on bulk water exports should give Ottawa the power to stop bulk water exports where existing regulations fail to do so and also to prevent any succeeding provincial governments from changing the policies and laws enacted by previous provincial governments on these matters.

**3. Remove Water Protection Restrictions in**

**Trade Regimes:** Since the NAFTA rules pose a direct obstacle to implementing a ban on bulk water exports, any plan must be accompanied by a strategy to remove restrictions from NAFTA. In effect, this is the essence of the motion passed by the House of

Commons on June 5, 2007. The objective here is to renegotiate relevant portions of NAFTA to obtain guarantees that governments have the right and obligation to protect their water basins. This would include exemption from the proportional sharing clause, thereby permitting the use of bans and quotas on bulk water exports. If such negotiations proved to be unsuccessful, then the federal government would have the option of exercising NAFTA's abrogation clause to withdraw from the Agreement.

**4. Utilize Bi-National Water Treaty Mechanisms:**

More creative use should be made of treaty mechanisms like the International Joint Commission in implementing its water export strategy. Ottawa should be ready, for example, to call upon the IJC to investigate certain questions pertaining to its water export policy and to make use of its dispute settlement procedures for dealing with contentious issues. To do so, however, the federal government needs to substantially increase its support for the IJC, both financially and politically, as advocated in the Auditor General's 2001 Report and the Canada's Environment Commissioner's 2001 Report.



**5. Implement Bold Water Conservation Measures:**

To be credible, there must be a bold and effective water conservation program as part of an overall strategy on bulk water exports. At the outset, a ban needs to be put on all large scale diversions between watersheds within this country. A new water conservation ethic is needed, one that puts priority on demand management rather than the

assumption of a limitless supply of water. Here, the federal government should work more closely with the provinces in developing water consumption standards and/or targets for residential, agricultural and industrial use. This should also include strategies for managing water supply [e.g. balancing withdrawal and in-stream uses] based on sound science.

### Conclusion

Developing a water security policy and plan along these lines cannot be done in isolation from other components required for a national water strategy. The urgent needs, for example, to completely map the groundwater sources in this country provides an essential base of knowledge for developing a comprehensive policy and strategy that ensures and maintains Canada's water security priorities. In short, it is essential that the five prong strategy outlined here be developed in concert with other key components of an overall national water policy as an integrated whole.

In implementing this five prong water security policy and strategy, emphasis also needs to be put on the importance of public management and citizen accountability. If bulk water export schemes were to become operational, they would be driven by corporations on a for-profit basis. Yet, if water is considered to be a national strategic resource and an ecological trust, it is imperative that it be managed and controlled for universal benefit through the public system. Similarly, since water is a basic human right and essential for life itself, then it is also imperative that new mechanisms for citizen participation and

accountability be built into any public bulk water management plan.

At the same time, Canada's water security strategy should include provisions for emergency purposes. If, a region of the U.S. were to suddenly encounter water scarcities of a life threatening nature that could not be redressed by domestic water sources, then Canada would have a moral obligation to consider whether it could best respond to such a crisis by providing bulk water supplies on an emergency and temporary basis. However, such a policy would have to be based on certain conditions --- that clear criteria and procedures be established for identifying qualified water stress regions; that any emergency bulk water transfer assistance be publicly managed and distributed; that it must be applied as a short term measure for temporary relief, not as a substitute for restoring local water basins, which is essential for any long term solution.

We hope that citizen groups and social movements across the country will take up the challenge to promote public discussion and debate on the issues and proposals outlined in this report, thereby generating a groundswell of popular, grassroots support for a pan-Canadian policy and strategy on bulk water exports to the United States. Only then will we be able to build a water security agenda for future generations in this country and the continent as a whole.

### Other Relevant Sources

- Tony Clarke, *Turning on Canada's Tap?* [a more lengthy and documented version of this report with footnotes] is available on the Polaris website at [www.polarisinstitute.org](http://www.polarisinstitute.org)
- Karen Bakker [ed.] *Eau Canada: The Future of Canada's Water*. Vancouver, UBC Press, 2007.
- Maude Barlow, *Blue Covenant: The Fight for Water as a Human Right*. Toronto, McClelland & Stewart, 2007.
- Gordon Water Group, *Changing the Flow: A Blueprint for Federal Action on Water*, 2007. [www.gordonwatergroup.ca](http://www.gordonwatergroup.ca)
- University of Toronto: Munk Centre for International Studies, *A Model Act for Preserving Canada's Water*, February 6, 2008.

The **Polaris Institute** assists citizen groups and social movements in developing new tools and strategies for democratic social change on major public policy issues in Canada and internationally.

**Tony Clarke**, founder and executive director of Polaris Institute, is the author of several books on water issues including *Blue Gold: The Battle Against the Corporate Theft of the World's Water* [with Maude Barlow] and *Inside the Bottle: Exposing the Bottled Water Industry*.