

Monterey Institute of International Studies  
Master of Arts in Commercial Diplomacy

**Recommendations for the U.S. Trade Representative to  
Negotiate Trade Rules with Canada Governing Bulk Water  
Exports**



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*Dedicated to Ewa Spain for her love and patience*

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## PURPOSE

This project was completed to fulfill the requirements for the Master of Arts in Commercial Diplomacy at the Monterey Institute of International Studies (MIIS).

## SCENARIO

For the purpose of this project, I assume the role of a Deputy Commissioner for the Bureau of Reclamation, U.S. Department of the Interior. My task is to advise the U.S. Trade Representative on negotiations with the Canadian Department of Foreign Affairs and International Trade (DFAIT) in order to establish rules within the North American Free Trade Agreement (NAFTA) that allow for the export of bulk, unprocessed water.

In this project, I assume that a municipal water district on California's Central Coast, Monterey Peninsula Water Management District (MPWMD), wishes to import bulk water from a British Columbia company.

## NOTE TO READER

Water exports take a variety of forms, and, for the purposes of this project, it is important to distinguish among them. Water can be traded as either a raw (bulk) or value-added product. Water traded as bottled or value-added water is covered by international trade rules as an economic good. The focus of this project will be on the trade in bulk, unprocessed water across international borders for municipal use.

## DEFINITIONS

Bulk water exports - the removal and transfer of water out of its basin of origin by man-made diversions (e.g., canals), tanker ships or trucks, and pipelines.

Crown land – the term used for 92% of the province that is publicly owned.

Environment Canada – the name of Canada’s federal environmental department.

Groundwater – subsurface water usually found in an aquifer.

Groundwater overdrafting – The process of taking more water out of an aquifer than naturally returns to it.

Hydrologic Cycle – the process in which the flow of solar energy reaching the earth from the sun evaporates fresh water into the atmosphere from the oceans and land surfaces and redistributes it around the world.

Overdraft – the process of taking water out of an aquifer at a rate higher than it takes to naturally replenish.

Reclaimed Water – waste water that has been treated for municipal use.

Royalties – the granting of a right by a sovereign to a corporation or individual to exploit specified resources.

Runoff – the difference between precipitation onto land surfaces and evaporation from those surfaces.

## ISSUE

A California water district with a severe water shortage has received a proposal from a British Columbia company for the short-term delivery of fresh water in bulk quantities for residential use. The company has a location in the province from where water could be shipped, i.e. at a deep sheltered harbor near an abundant source of water. However, under British Columbia's *Water Protection Act*, the provincial government's Water Management Branch<sup>1</sup> refuses to issue a license to the company if the water is to be exported outside the province beyond a 20-liter container threshold. Thus, the British Columbia *Water Protection Act* precludes a beneficial transaction for the export of bulk, unprocessed water that could bring immediate relief to a California water district in need of additional supplies.

California's water shortage has resulted in serious ecological damage that threatens the long-term security of the state's population. The situation will gradually become exasperated as water shortages are expected to increase in the face of California's growing population and climate change impacts. The damage occurs when water agencies, unable to meet demands until new alternative sources are allocated, temporarily increase pumping of surface and ground water at unsustainable rates. Despite being temporary, this unsustainable practice can permanently ruin underground aquifers, contaminate drinking water, and place the local ecology in peril. Water exported in bulk is suitable for such purposes as it can provide temporary relief during droughts and shortages before new sources, such as desalination, are developed.

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<sup>1</sup> The Water Management Branch is a section of the provincial agency Land and Water British Columbia Inc., which reports to the Minister of Sustainable Resource Management.



## EXECUTIVE SUMMARY

**MEMORANDUM**

To: Ambassador Robert B. Zoellick  
United States Trade Representative

From: Keith Spain, Deputy Commissioner  
Bureau of Reclamation, U.S. Department of the Interior

Subject: Options to Reduce Water Shortages in California through Trade with  
Canada

Date: June 27, 2002

## Issue

British Columbia's *Water Protection Act* prohibits the issuance of licenses to remove water from the province in containers larger than 20 liters. Consequently, this precludes a viable option for water district throughout California to immediately mitigate their water shortages. British Columbia's *Water Protection Act* and similar legislation in Canada's other nine provinces exist because, the federal government of Canada is concerned that as soon as one of the provinces allows its water to be exported in bulk, the North American Free Trade Agreement (NAFTA) rules on trade and investment will apply to subsequent exports of bulk water. As result of the NAFTA application on such exports, the government of Canada would be restricted in its jurisdiction to limit one of its natural resources.

The mission of the Bureau of Reclamation is to manage water in the Western United States in an environmentally and economically sound manner. To accomplish this mission, the Bureau of Reclamation urges the Office of the United States Trade Representative to engage in negotiations with Canada's Department of Foreign Affairs and International Trade in order to amend British Columbia's *Water Protection Act* so that water may be exported in bulk for the purpose of mitigating water shortages in California.

California's chronic water shortages and prolonged droughts have caused the U.S. severe economic and environmental damage. According to the National Oceanic & Atmospheric Administration, the cost from water loss after the 1987-1992 West Coast drought, including damages to agriculture and environment, totaled \$39 billion. Since the West Coast drought, conservation efforts throughout California have led to significant

reductions in water use per capita. Nevertheless, some hydrologic regions of California still lack a sufficient supply of fresh water despite successful implementation of conservation measures. In many cases, water districts that have not acquired new permanent sources of water have allowed respective water agencies to strain existing, local sources just to meet the demands in their jurisdiction. This leads to unsustainable practices such as groundwater overdrafting and removing water from rivers at rates higher than it takes to naturally replenish. Such actions can lead to irreversible damage to drinking water supplies, aquifers, and the ecology. The magnitude of shortages and potential droughts demonstrates the urgency to take action.

## Background

By 2020, California's water shortage<sup>2</sup> will increase by 50% during average years (1.6 million acre-feet or maf to 2.4 maf)<sup>3</sup> and 22% during drought years (5.1 maf to 6.2 maf).<sup>4</sup> The greatest increase in demand will be from urban users. Furthermore, as the state's population expands, more water will be needed to preserve and restore California's ecosystems as well as maintain its natural resources. Population growth in most of the state's coastal counties, the likely importers of water from British Columbia due to geography, is expected to increase 40-60 % in the next twenty years.

To successfully negotiate an amendment to the *Water Protection Act*, it is important to understand that the issue of water exports is very politicized in Canada. Few Canadian politicians will publicly state that they support the export of water. Canada's Environment Minister David Anderson and the British Columbia Premier Gordon Campbell, two key figures for this issue, both oppose exporting water in bulk. Canada's most prominent environmental non-governmental organizations, civil society groups, and public sector employees oppose exporting water and have formed a coalition named 'Water Watch'. The majority of First Nation Bands are also opposed, namely those who live away from the coast or in drier regions and would not stand to benefit from the export of water.

Opponents maintain that a ban is necessary in order to prevent bulk, unprocessed water from becoming a commodity and, consequently, subject to the North American Free Trade Agreement (NAFTA) rules. They oppose exposing it to the NAFTA rules, because water is vital to human life and requires governmental regulation to protect it from becoming exhaustible. At worst, they fear that once trade in bulk water has begun, Canada will be obliged by its trade commitments to export water to parched parts of the world at the expense of their people and environment. From an economic standpoint, Canadians argue that exporting water in bulk, as opposed to added-value bottled water, provides only a one-time benefit to the economy with marginal investment in capital and local human labor.

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<sup>2</sup> Shortage represents the gap between water demands and water supplies

<sup>3</sup> An acre-foot is the amount of water two American households (4 people total) use per year

<sup>4</sup> California Department of Water Resources, 1998. The California Water Plan Update Bulletin 160-98

Americans and Canadians have a long history of friendly relations on water matters, as demonstrated by the success of the International Joint Commission (IJC), which has become a model for managing cross-border resources. Also, the Great Lakes Governors and Premiers have followed a set of principles to guide them in developing, maintaining, and strengthening the regional management regime for the Great Lakes ecosystem.

#### Recommendation

Due to the politically sensitive nature of exporting fresh water from its watershed in bulk quantities, the Bureau of Reclamation recommends that the USTR should not initiate negotiations with the Canadian DFAIT concerning action to amend the *Water Protection Act* or any of the other nine pieces of legislation banning bulk water exports. The Bureau of Reclamation is confident that, given increasing water shortages as well as a growing population in the American Southwest and global warming, the price for new water in California will demand a premium high enough to induce Canadian entrepreneurs to challenge the respective provincial ban on bulk water exports.

A successful challenge will encourage a provincial premier to seriously consider amending the respective bulk water export legislation, e.g. in 2001, the Newfoundland Premier Roger Grimes challenged that province's bulk water export law following a local businessman's proposal. After one of the provincial premiers publicly announces his intention of amending or overturning the said legislation, the USTR should seek an opportune moment to react and introduce a proposal to the Canadian Prime Minister and DFAIT that allows NAFTA members to export bulk water but also safeguards such exports from the NAFTA trade and investment rules.

Due to the sensitivity of the issue, the Bureau of Reclamation advises that the USTR should not hold talks or negotiations with the Canadian Prime Minister or DFAIT solely on bulk water exports; rather, the proposal on bulk water exports should be attached to an agenda of other trade issues to be discussed between the USTR and DFAIT and/or the Canadian Prime Minister and U.S. President.

The Bureau of Reclamation suggests that the proposal to the Canadian Department of Foreign Affairs and International Trade should include maintaining the current decision making standard (e.g. *Environmental Impact Assessment* in British Columbia) that the provinces utilize for reviewing proposals to withdraw water for exports which are presently allowed, i.e. less than the respective threshold. For example, British Columbia's current *Environmental Impact Assessment* already takes into account environmental concerns and offers input from all parties who have a stake in a proposal to withdraw water.

However, to safeguard potential bulk water exports from the NAFTA rules on trade and investment, the USTR should include in its proposal to the Canadian DFAIT an 'escape-clause' which allows the possibility of interrupting trade flows in case of environmental problems. Further, to ensure that water removed for the purpose of export in bulk

quantities adheres to the principles of sustainable development, a cornerstone of Environment Canada's mission, the USTR may include in its proposal the establishment of a fund for ecological preservation. For example, a percentage from each export transaction will be donated to the fund for various ecological projects in the respective watershed from where the water was removed, i.e. wetlands preservation.

The Bureau of Reclamation recommends that the USTR include in its proposal the following principles which would be applied to each and every bulk water export proposal in the future:

- No significant adverse individual or cumulative impacts to the quantity or quality of the waters and water-dependent natural resources of the water basin;
- An improvement to the water and water-dependent natural resources (e.g. establishment of fund for wetlands preservation);
- Compliance with the applicable provincial, territorial, federal, and international laws and treaties;
- No adverse impact to the local drinking water supply, or water supply for agricultural and industrial use;
- Water that is exported is 'surplus' (additional water after all the water needs for the local constituents, industries, agriculture, and environment have been met);
- Applicant must demonstrate that there are no practical alternatives to the removal; and
- Conservation practices are in place in the region importing the water.

**BACKGROUND**Overview of California's Water Needs

Table 1	California Water Budget (million acre-feet)				
	1995		2020		Change In avg yrs
	Average	Drought	Average	Drought	
<i>Water Use</i>					
Urban <sup>5</sup>	8.8	9.0	12.0	12.4	+3.2
Agricultural	33.8	34.5	31.5	32.3	-2.3
Environmental <sup>6</sup>	36.9	21.2	37.0	21.3	+0.1
<b>Total</b>	<b>79.5</b>	<b>64.7</b>	<b>80.5</b>	<b>66.0</b>	
<i>Supplies</i>					
Surface Water	65.1	43.5	65.0	43.4	
Groundwater	12.5	15.8	12.7	16.0	
Recycled and Desalted	0.3	0.3	0.4	0.4	
<b>Total</b>	<b>77.9</b>	<b>59.6</b>	<b>78.1</b>	<b>59.8</b>	
<b>Shortage</b>	<b>1.6</b>	<b>5.1</b>	<b>2.4</b>	<b>6.2</b>	

Source: *The California Water Plan Update BULLETIN 160-98, November 1998.*

The red numbers highlighted in yellow in Table 1 show the difference between California's forecasted supplies and demands. California's increasing population is the driving force behind increasing water demands. Urban water demand will increase by about 3.2 maf in average years, and, as the state's population expands, more water will be needed to preserve and restore California's ecosystems as well as maintain its natural resources. Increases in water use efficiency combined with reductions in irrigated acreage, resulting from urban encroachment, are expected to reduce average year agricultural water demand by about 2.3 maf by 2020.

California's Department of Water Resources has recommended the state's water agencies a number of supply augmentation and demand reduction options in order to reduce the shortage expected in 2020.

However, even after the implementation of options to augment supply and reduce demand, parts of California will still experience water shortages. The table below shows shortages in California's hydrologic regions by the year 2020 after the implementation of the recommended options.

<sup>5</sup> Urban per capita water use includes residential, commercial, industrial, and institutional uses of water.

<sup>6</sup> Environmental water use is defined as: dedicate flows in state and federal wild and scenic rivers; instream flow requirements by water right permits and court actions; applied water demands of managed freshwater wildlife areas.

Hydrologic Region	Average Year	Drought Year
North Coast	0	176
Sacramento River	0	722
North Lahontan	10	128
San Francisco Bay	0	0
San Joaquin River	0	658
Central Coast	0	100
Tulare Lake	202	868
South Lahontan	0	0
South Coast	0	0
Colorado River	0	0



*Figures in thousand acre-feet (taf)*

**Source: *The California Water Plan Update* BULLETIN 160-98, November 1998.**

A Case Study: Monterey, CA

The Monterey Peninsula Water Management District (MPWMD) has a water shortage of 9,000 afy following a state order for the Peninsula’s major water purveyor, Cal-Am, to reduce its pumping from the Carmel River by 75%.<sup>7</sup> In 1995, the state declared that Cal-Am’s pumping from the Carmel River exceeded its water right and was damaging the river’s ecosystem. To reduce and eventually eliminate the shortage, MPWMD advanced two proposals, Plan A and Plan B, for new water supplies.<sup>8</sup> As the District’s voters have already rejected Plan A, the MPWMD will proceed to implement Plan B.

Plan A was a proposal from the MPWMD to build a dam on the Carmel River. In November 1995, the District’s voters rejected funding for the dam. The primary reasons for rejecting the proposal are: (1.) the dam would have contributed to additional population growth; (2.) it would permanently alter flow regimes in the Carmel River in ways that would harm its ecological balance; and (3.) the amounts charged for water would be too high (22-49% higher).

The MPWMD will proceed to implement Plan B, as proposed by the California Public Utilities Commission (PUC): a collection of non-dam alternatives, all of which will be

<sup>7</sup> Stern, Henrietta (staff member of Monterey Peninsula Water Management District), Haddad, Brent M. *Economic Incentives for Water Conservation on the Monterey Peninsula: The Market Proposal*, Journal of the American Water Resources Association, February 2000.

<sup>8</sup>Monterey Peninsula Long Term Water Supply Contingency Plan < <http://www.edaw.com/planb/>>

used to eliminate the shortage. The table below illustrates how much each alternative will yield. (measured in acre-feet per year - afy).

<i>Alternative</i>	<i>Amount (afy)</i>
Conservation	3,900
Desalination	5,000
Surface Water Injection	1,500
Reclaimed Water	200

**TOTAL** **10,600 afy**  
**SURPLUS** **1,600 afy**

As the table shows, after conservation measures and Plan B possibilities for new water have been employed, the region will have normal-year surpluses of roughly 1,600 afy. These surpluses would be used to:

- increase Carmel River flows;
- lower desalination capacity;
- increase storage in the Seaside aquifer; and
- provide water for existing lots.

Although the MPWMD plans to proceed with Plan B, it has not yet put the plan of building a desalination plant to a public vote. In the meantime, Cal-Am has continued to divert water at unsustainable rates from the Carmel River, leading to increased ecological damage to the river basin.

To reduce the stress on the river and allocate additional supplies until new sources of water have been developed, the MPWMD wishes to import water from a British Columbia firm. The B.C. firm has a location from which water could be captured, that would otherwise be discharged into the Pacific Ocean<sup>9</sup>, and transported to the Monterey Peninsula by marine vessel.<sup>10</sup>

However, pursuant to British Columbia's *Water Protection Act*, the Water Management Branch refuses to issue a license to the B.C. company if it will export the water outside the province in containers larger than 20 liters.

<sup>9</sup> Fisheries and Environment Canada, Hydrologic Atlas of Canada and U.S. Geological Service (USGS). High runoff rates in most of British Columbia are due to abundant precipitation. Coastal British Columbia enjoys the highest rate of precipitation in all of Canada; the annual average on the west coast of Vancouver Island is about 2,500 mm, or 8 feet, compared to California's annual average of just 21 inches.

<sup>10</sup> This is an assumption. Fact: The MPWMD is currently reviewing two plans to eliminate the water deficit: Plan A – build a dam on the Carmel River *or* Plan B – a collection of non-dam proposals, including a proposal from Terry G. Spragg & Associates to tow water in large polyurethane bags by oceangoing tugboat from a source in *northern California*. (<http://www.waterbag.com>) To date, the MPWMD has not decided which plan it will adopt.

## I. Policy Overview

### *Provincial Policy Overview: British Columbia*

#### British Columbia Water Protection Act 1995

The Water Protection Act (WPA) prohibits the removal of water from British Columbia *unless* the person

- a) is a licensed registrant under a registered license that remains in effect and complies with the license (there are only 6 license holders),
- b) removes the water in containers of *20 liters* capacity or less, of water that has been packaged in British Columbia, or
- c) obtained the water outside British Columbia.

The WPA also prohibits large-scale transfers between the Province's 6 major watersheds

- a) A person must not construct or operate a large-scale project capable of transferring water from one major watershed to another
- b) A person must not modify a project capable of diverting or of extracting water if the modification results in the project having the capability of transferring water at a peak instantaneous flow of  $10 \text{ m}^3$  or more a second from one major watershed to another major watershed. ( $10 \text{ m}^3 / \text{second}$  is equal to 580 acre-feet per day, the amount of water the city of Vancouver uses per day)

#### *Exceptions:*

The WPA provides that water originating in British Columbia may be used outside British Columbia's boundaries if:

- water is carried in vehicles, vessels or aircraft for the use of persons and animals while in transit across British Columbia's boundaries

The prohibition does not apply to:

- small-scale projects (less than  $10 \text{ m}^3 / \text{s}$  or 580 afd) within or between major watersheds or
- the transfer of water by large-scale projects within major watersheds.

Both of these categories are covered by the Province's *Environmental Assessment Act*.

#### Environmental Assessment Process for Bulk Water Removals

At present, bulk water removal projects which are allowed within British Columbia are subject to a process under the Province's Environmental Assessment Act.<sup>11</sup> The assessment process is designed to ensure that all relevant information about a project is obtained and evaluated in terms of predicted environmental, economic, social, cultural, heritage and health impacts.

The process requires joint decision making by the provincial Minister of Sustainable Resource Management and the Minister of Water, Land and Air Protection, but all steps of the process are open to public review and comment. Where a public hearing is conducted by the Environmental Assessment Board, the Cabinet makes the final decision. A balanced approach in making recommendations to the ministers is fostered through the direct involvement of provincial and federal agencies, local governments, First Nations and neighboring jurisdictions.

Project sponsors (proponents) must consult with the public. Their consultation programs are approved and monitored by the project committee, and the Environmental Assessment Office may require additional public consultation, including the establishment of a public advisory committee.

First Nations which have traditional territory located in the vicinity of a proposed project are provided with the opportunity to be directly involved in the environmental assessment process and through participation on the project committee. Proponents must consult with First Nations and report on the issues identified and the measures proposed to respond to those issues.

The assessment process may consider all phases of a project's lifecycle, from construction to abandonment. The Environmental Assessment Act also enables the review of "stand alone" activities where no physical construction is involved, but where environmental effects may occur.

#### Water Licenses to Remove Water from British Columbia

If a water removal project is approved, the proponent is then issued appropriate permits and water use authorization. The water license is the key permit and is issued by the Water Management Branch of the Ministry of Sustainable Resource Management. An important condition of a water license is its priority date. When more than one license has been issued for the same stream, the license with the earliest priority date has first right to available supply. The license with the second earliest priority date has second right, and so on. This rule applies regardless of the size and nature of project.

The terms and conditions of a typical water license include the following:

- the name and location of the stream from which water may be taken or stored,
- the location of the intake on the stream,
- the priority date of the license,

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<sup>11</sup> See Appendix 1 on pg. 60: Outline of the Environmental Assessment Process

- the purpose for which the water may be used,
- the maximum quantity of water which may be used or stored,
- the time of the year during which the water may be used,
- the property where the water is to be used and to which the license is attached,
- authorization to construct works to divert and convey the water from the stream to the place of use.

### *Federal Policy Overview: Canada*

In Canada, the federal government's policy on bulk water exports consists of three parts:

1. Joint Reference with the U.S. to the International Joint Commission (IJC)
2. Amendment to the International Boundary Waters Treaty Act
3. Canada-wide Accord for the Prohibition of Bulk Water Removal from Drainage Basins

### Joint Reference with the U.S. to the IJC

In February 1999, the governments of Canada and the United States requested that the IJC examine, report upon, and provide recommendations on matters that may affect levels and flows of waters within the boundary and transboundary basins, principally the Great Lakes, and shared aquifers. In its final report, the IJC advised that the Canadian and US governments, "should not permit any new proposal for removal of water from the Great Lakes basin to proceed unless the proponent can demonstrate that the removal would not endanger the integrity of the Great Lakes Basin."<sup>12</sup>

The IJC's decision was based on their conclusion that there is uncertainty about the availability of Great Lakes water to meet all ecosystem needs, including human needs over the long term.<sup>13</sup>

In June 2001, the governors of the eight states that border the Great Lakes and the premiers of Ontario and Quebec signed the Great Lakes Charter Annex 2001 in which they agreed to establish new limits within three years on the diversion or sale of water within the Great Lakes Basin to other parts of the country or abroad.<sup>14</sup>

### Amendment to the International Boundary Waters Treaty Act (IBWTA)

In December 2001, the Canadian federal government enacted legislation amending the IBWTA. This new legislation prohibits the bulk removal of water from Canadian

<sup>12</sup> International Joint Commission. 2000. Protection of the Waters of the Great Lakes: *Final Report to the Governments of Canada and the United States*, p. 47. <<http://www.ijc.org/ijcweb-e.html>>

<sup>13</sup> *ibid*

<sup>14</sup> Great Lakes Charter Annex 2001, Council of the Great Lakes Governors, <<http://www.cglg.org/projects/water/>>

boundary waters and sets in place a licensing regime for water projects on these boundary bodies.

### Canada-wide Accord for the Prohibition of Bulk Water Removal from Drainage Basins

Through the Canadian Council of Ministers of the Environment (CCME), the federal government of Canada has encouraged all provinces and territories to endorse a voluntary national accord to prohibit bulk water removals of surface and groundwater from the Canadian portions of major drainage basins. To date, all provinces and territories have signed the accord and enacted legislation that bans the removal of bulk water from its natural basin. New Brunswick has signed the accord but has yet to enact legislation. The federal government is currently working with the three territories to implement a prohibition on bulk water removals. The following table outlines the legislation on bulk water removals from each province.

	<b>Legislation</b>	<b>Approach / Threshold</b>
Prince Edward Island	Amendments to the PEI <i>Environmental Protection Act</i>	Prohibition of drilling for, extracting, taking, removing or withdrawing for the purpose of transfer or removal from the province from groundwater, water basin, watercourse, or surface water body. <u>Threshold is 25 liters</u> . Exceptions include: <ul style="list-style-type: none"> <li>• Water used in the ordinary course of operating vehicles, vessels or aircraft;</li> <li>• For use by persons or animals while in transit;</li> <li>• For purpose of food or products;</li> <li>• With written permission of the Minister to meet short-term safety, security or humanitarian needs.</li> </ul>
Newfoundland & Labrador	<i>Water Resources Protection Act</i> (Dec. 1999)	Prohibition of bulk water removals from Newfoundland. <u>Threshold is 30 liters</u> . Exemptions: <ul style="list-style-type: none"> <li>• Water for operation or on-board requirements of a motor vehicle, vessel or aircraft;</li> <li>• Water used in the transport of food or an industrial product;</li> <li>• Water for non-commercial uses including safety or humanitarian purposes.</li> </ul>
Nova Scotia	<i>Water Resources Protection Act</i> (June 2000)	Prohibition of surface and groundwater removal from Nova Scotia portion of the Atlantic drainage basin. <u>Threshold is 25 liters</u> .
New Brunswick	None	No legislation, although the province has endorsed the accord.
Quebec	<i>Water Resources Preservation Act</i> (Nov. 1999)	Prohibition of transfer of surface and groundwater outside of Quebec. <u>Threshold is 20 liters</u> . Exemptions: <ul style="list-style-type: none"> <li>• Water for hydro-electricity production;</li> <li>• Potable water for border communities;</li> <li>• Ballast water;</li> <li>• Humanitarian purposes.</li> </ul>
Ontario	Water Transfer Regulation ( <i>Water Resources Act, 1999</i> )	Watershed approach (3 major watershed defined). Prohibition on the transfer of surface water out of defined Ontario water basins. <u>Threshold is 20 liters</u> .
Manitoba	The <i>Water Resources and Conservation and</i>	Prohibition of bulk water removals from Manitoba's portion of the Hudson Bay drainage basin. <u>Threshold is 25 liters</u> . Exemptions include:

	<i>Protection and Consequential Amendments Act</i> (Aug. 2000)	<ul style="list-style-type: none"> <li>• Water used in vehicles, vessels or aircraft;</li> <li>• Short term humanitarian needs;</li> <li>• Water used to manufacture or produce a product.</li> </ul> Prohibition against water removal does not apply to water removed outside the basin.
Saskatchewan	<i>Water Corporation Act</i> (2001)	Recent amendments provide that the water corporation shall not grant any approval for taking water from a watershed. <ul style="list-style-type: none"> <li>• Transferring water between watersheds within Sask.;</li> <li>• Packaged in containers with capacity of less than maximum capacity set out in the Regulations;</li> <li>• Used in ordinary course of carrying water in vehicle, vessel or aircraft for: use of persons or animals being transported; the ordinary operation of the vehicle, vessel or aircraft; or transportation of food or products in the vehicle, vessel or aircraft;</li> <li>• Or is removed in a manner or for purpose prescribed in the Regulations.</li> </ul>
Alberta	<i>Alberta Water Act</i> (1999)	Watershed approach (7 major river basins defined). Prohibition on the licensing of water transferring between major river basins in the province AND for transfers outside of Canada unless authorized by a special Act of the Legislature.
British Columbia	<i>Water Protection Act</i> (1995)	Prohibition on large-scale diversions between 9 major watersheds of the province. Prohibition on the removal of water out of province. <u>Threshold is 20 liters.</u>
Yukon, Northwest Territories, Nunavut		The Department of Indian Affairs and Northern Development (DIAND) is implementing policy to prohibit bulk water removal in cooperation with territories.
Canada	<i>Amendments to International Boundary Waters Treaty Act</i>	Legislation to prohibit bulk water removal from boundary waters, principally the Great Lakes.

## II. Legislative Overview

### Jurisdictional Responsibilities for Canada's Freshwater Sources

In Canada, the responsibility for water management is shared by the federal, provincial, and municipal governments, and in some instances, by First Nations and/or indigenous governments under self-government agreements. Although Canada's *Constitution Act* does not mention water, waters that lie solely within a province's boundaries fall within the constitutional authority of that province.

The waters flowing in the national parks, First Nations reserves, and other federal lands come under federal jurisdiction. The federal government is also responsible for waters that form or flow across the international boundary between Canada and the United States and for waters in the Northwest Territories, the Yukon, and Nunavut, with the exception of certain limited authorities for indigenous governments as defined in self-government agreements.

Overlaps between federal and provincial legislation on water are common; but if there is a direct conflict between valid federal and provincial legislation, then the federal legislation is paramount. Nevertheless, governments often negotiate arrangements with one another rather than test the legal limits of their power to act unilaterally.<sup>15</sup>

The shared responsibility for fresh water in Canada necessitates close cooperation and collaboration among all levels of government, First Nation/indigenous peoples, and the public.

Below is a breakdown of jurisdictional responsibilities for water according to each level of government.

#### Federal

- Navigation;
- Fisheries;
- Federal Lands;
- First Nation Lands with exceptions<sup>16</sup>;
- Boundary and transboundary waters;
- Works for 'the general advantage of Canada'<sup>17</sup>; and
- National Security ('peace, order and good government')<sup>18</sup>

<sup>15</sup> Frank Quinn, Policy Advisor, Water Issues Branch, Environment Canada, Ottawa, ON, *Canadian Water Resources Journal*, Vol. 21, No. 4, p. 331. 1996.

<sup>16</sup> Sec. 35, *Constitution Act, 1982*, "Government of Canada recognizes the inherent right of self-government as an existing Aboriginal right." Under this policy, different types of water use and control would fall within the powers of First Nations governments. Canada's *Indian Act* allows First Nations to exercise some control over water management. However, First Nations must still apply to the Province to receive water licenses.

<sup>17</sup> Sec. 92 (10) *Constitution Act 1867*

### Provincial

- Flow regulation;
- Authorization of water use development, i.e. granting licenses or permits to use water;
- Authority to legislate areas of water supply, pollution control, irrigation, safe drinking water, thermal and hydroelectric power development; and
- Overseeing municipal water and sewer infrastructure.

### Federal-Provincial (Shared)

- Interprovincial water issues;
- Agriculture;
- Significant national water issues; and
- Health.

### Territories

The federal government has responsibility for administering Crown land and water resources in the North. It does this through the development and implementation of policies, legislation, regulations and programs offered primarily through the federal Department of Indian Affairs and Northern Development's (DIAND) regional offices in Northwest Territories, Yukon and Nunavut.

### Municipal

Municipalities manage the infrastructure related to water treatment and delivery, as well as plan, finance, and control the operations related to it. They carry out these operations according to legislation in the respective province or territory.

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<sup>18</sup> Sec. 91 (preamble and conclusion) *Constitution Act, 1867*

### III. Legal Overview

#### Classification of Water under the Harmonized System (HS)

The Harmonized System (HS) is an international six-digit commodity classification developed under the auspices of the Customs Cooperation Council. Both Canada and the United States have converted their tariff schedules to conform to the HS. All potential commodities are defined and described in the HS. The HS includes water of all kinds (other than seawater, which is described in a separate heading) under section 2201.

*2201.90.0000: Other waters, including natural or artificial mineral waters and aerated waters, not containing added sugar or other sweetening matter nor flavored; ice and snow.*

The existence of an HTS number means that the U.S. Customs Service and Canada Customs and Revenue Agency can process shipments of fresh water.

#### Canada-U.S. Free Trade Agreement (CUSFTA)

On January 2, 1988, Canada and the United States signed the Canada-U.S. Free Trade Agreement (CUSFTA). During the drafting stage of the CUSFTA, there was discussion among the Canadian drafters on whether to include a specific provision exempting water from the agreement. Water was a concern for Canadians in light of earlier large-scale proposals from both the U.S. and Canadian politicians to divert entire rivers southward to the United States. Some Canadians argued that since water was listed in the U.S. and Canadian tariff schedules it must be a “good” and therefore subject to the CUSFTA rules. The final consensus was that it was better not to have such a provision since the inclusion of an exemption for an issue that had nothing to do with international trade – water diversion projects are not part of international trade agreements – would raise legal questions about other non-trade issues.<sup>19</sup>

#### North American Free Trade Agreement (NAFTA)

On December 17, 1992, Prime Minister Mulroney of Canada, United States President Bush, and President Salinas of Mexico signed the North American Free Trade Agreement (NAFTA). NAFTA incorporates many provisions of both the General Agreement on Trade and Tariffs (GATT) and the CUSFTA.

On December 2, 1993, approximately one month before NAFTA came into force, the governments of Canada, Mexico, and the United States, at the request of Prime Minister Chretien, issued the following unsigned joint statement:

‘The NAFTA creates no rights to the natural water resources of any Party to the Agreement. Unless water, in any form, has entered into commerce and becomes a good or product, it is not covered by the provisions of any trade agreement including the

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<sup>19</sup> Hart, Michael. 1994. *Decision at Midnight: Inside the Canada-U.S. Free-Trade Negotiations*. p. 355

NAFTA. And nothing in the NAFTA would oblige any NAFTA Party to either exploit its water for commercial use, or to begin exporting water in any form. Water in its natural state in lakes, rivers, reservoirs, aquifers, water basins and the like is not a good or product, is not traded, and therefore is not and never has been subject to the terms of any trade agreement.

International rights and obligations respecting water in its natural state are contained in separate treaties and agreements negotiated for that purpose. Examples are the United States-Canada Boundary Waters Treaty of 1909 and the 1944 Boundary Waters Treaty between Mexico and the United States. ’

Although this statement may not be legally binding, it is the only statement released to date from the Parties on whether water is considered a good by the NAFTA.

#### NAFTA & GATT Issues Pertaining to Bulk Water Exports

Contrary to the reassurances of federal politicians, Canadian opponents fear that Canada’s water resources are not protected under the terms of the NAFTA. One Canadian NGO, Water Watch, has called on the federal government to open negotiations to exempt water from NAFTA or, *preferably*, ‘sink the deal’.<sup>20</sup> In their campaign brochures to stop water exports, Water Watch argues that the following NAFTA rules would jeopardize Canada’s control of its fresh water once it becomes a commodity:

- National Treatment for Investors & Investments (NAFTA Article 1102)

Water Watch fears that trading water would not be limited to Canadian companies nor can the federal government use export taxes as a way to embargo bulk water exports. Thus, Water Watch argues, NAFTA limits the ability of the Canadian federal government to regulate this natural resource.

- Expropriation and Compensation (NAFTA Article 1110)

Water Watch fears that if bulk water exports are allowed, Canada will have to pay billions in compensation to U.S. or Mexican investors if Canada ever wanted to stop the trade flow. Water Watch cites the Sun Belt case as a prime example.

- Proportionality Provision (NAFTA Article 315)

According to the proportionality provision in NAFTA, once trade in bulk water has begun, at least the amount of water that has been authorized for trade cannot be withdrawn from trade by an action of the country of origin. Canadian opponents to water exports fear that the U.S. will be entitled to a proportional share of Canadian water resources in perpetuity once exports get underway. In fact, one of Water Watch’s campaign slogans is ‘once water exports have started, the tap can never be turned off’.

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<sup>20</sup> *ibid*

- Import and Export Restrictions (NAFTA Article 309 and GATT XI)

Pursuant to NAFTA Article 309 and GATT XI, no Party may adopt or maintain any prohibition or restriction on its exports, with exceptions. Water Watch fears that once a province allows bulk water to be exported, the province will be unable to change its policy to restrict or prohibit future exports.

#### **IV. Small-Scale Water Exports from Canada**

##### Cross-Border Movement of Water by Pipeline and Bulk Export of Water to Non-Canadian Ships (1980s-Present)

Since the 1980s, water has moved by pipeline from Canada to the U.S. They all involve cooperative arrangements for municipal water supply, yet it is still unclear whether these would be considered exports under the NAFTA. The arrangements are carried out by the following neighboring Canadian and American communities:

- St. Stephen, New Brunswick to Calais, Maine
- Coutts, Alberta to Sweetgrass, Montana
- Vancouver, British Columbia to Port Roberts, Washington
- Neche, North Dakota to Gretna and Altona, Manitoba

The amount of water involved in the Vancouver, B.C. to Port Roberts, WA pipeline transfer is 730 afy.

##### Canada Sells Water to Foreign Ships

One form of bulk water export that has been occurring for a long time in Canada is the sale of water to foreign ships calling at Canadian ports. Crewmembers buy the water for use on-board. In the province of Newfoundland, for example, the city of St. John's provides most of the water sold to vessels in port. The amount of water sold is unknown since it is not metered. Payments to the city of St. John's for water are according to the hours the vessel is connected to the loading hose.

## V. Recent Export Proposals from Canada

In the 1990s, three different firms (two Canadian: *Nova Group* and *McCurdy Group*, one American: *Sun Belt Water Inc.*) applied or obtained licenses from the provincial governments of British Columbia, Ontario, and Newfoundland to remove water in bulk for export by tanker ship to overseas markets. Like the transborder water supplies mentioned earlier, the volume of water in two of the three export proposals in the 1990s was an insignificant amount and would have involved no serious environmental disruption to the water source.

However, one of the proposals (*Nova Group*) involved removing water from one of the Great Lakes, Lake Superior. The problem is that only 1% of the water in the Great Lakes is renewable every year through precipitation and rivers that feed and drain into the Lakes. The other 99% is fossil water: water left over from the melting of glaciers of the Pleistocene epoch about 12,000 years ago. The proposal created public outcry on both sides of the border, and the license to remove the water was revoked. This proposal became the vehicle for Canadian opponents of bulk water exports to eventually persuade the federal government to take action.

### Sun Belt Water Inc.<sup>21</sup>

In 1991, at the peak of the 5-year ‘West Coast Drought’, the Sun Belt – Snowcap joint venture won a 5-year contract to deliver up to 5,000 afy of fresh water to the city of Goleta, California, for residential use. Days later, the government of British Columbia imposed a moratorium on bulk water exports by marine vessel. Consequently, no water was ever exported to Goleta, and the city followed its second option and joined the nearby city of Santa Barbara in building a desalination plant.

After filing a civil action in the provincial Superior Court against the government of British Columbia, the government awarded Snowcap a cash settlement but failed to negotiate a settlement with Sun Belt. Consequently, in 1998, Sun Belt filed a *Notice of Intent to Submit a Claim for Arbitration* under Chapter 11, Article 1119 of the NAFTA. Sun Belt claims that the treatment provided to Sun Belt by the government of British Columbia and the provincial court system violated NAFTA articles 1102 (national treatment for investors and their investments), 1103 (most favored nation treatment), 1104 (standard of treatment), and 1105 (minimum standard of treatment). Sun Belt is seeking \$10.5 billion. The case is still pending.

### Nova Group

In 1998, the government of Ontario, then under Conservative Party Premier Mike Harris, issued a five-year permit to Nova Group, an Ontario company that planned to take 600

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<sup>21</sup> Information from this section on Sun Belt based on telephone interviews with Sun Belt CEO Jack Lindsey and Nathu, Nazlin 1993. ‘s *Response to the British Columbia Government’s Stewardship of the Water Initiative in Respect of Water Pricing*, West Coast Environmental Law Association. <<http://www.wcel.org/wcelpub/7510.html>>

million liters of water per year from Lake Superior. The water was to be loaded in bulk container ships and sent to undisclosed buyers in Asia. However, the permit was revoked that same year following a storm of protests to stop the export of water from the Great Lakes. The Nova incident triggered the federal government to pursue its strategy to prohibit bulk water removals. Ontario has since endorsed the national accord that supports prohibition of bulk water removals.

### McCurdy Group

In June 2001, Newfoundland and Labrador Premier Roger Grimes (Liberal Party) expressed his interest in challenging the province's legislation prohibiting the removal of bulk water. The legislation had been put in place two years earlier by the province's former premier, Brian Tobin (Liberal Party). Premier Grimes endorsed a plan developed by the Newfoundland construction company McCurdy Group to skim 500,000 cubic meters of water from Gisborne Lake, Nfld, each week and ship it in bottles and bulk container ships to markets in Canada and the U.S. According to the McCurdy Group, draining 500,000 cubic meters of water would lower the lake an inch, however the lake would be naturally replenished from natural springs within 10 hours.

The McCurdy Group planned to build a 20-km pipeline, a docking facility and a bottling plant in Grand LePierre, a remote Newfoundland community with a population of 350 and unemployment rate of 75%.<sup>22</sup> Total expenditures for the project were estimated at \$35 million (Canadian Dollars). The plan received full support from Premier Grimes and Grand LePierre Mayor Edward Fizzard. According to Grimes, the McCurdy project could generate royalties worth \$20 million per month. Grimes promised to use the money the government would receive from the export to provide free tuition for Newfoundland and Labrador students.<sup>23</sup>

By October 2001, amidst intense political pressure to refrain from exporting water, Grimes recalled his support for the project.

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<sup>22</sup> Interview with Grand LePierre Mayor, Edward Fizzard. Cross, Brian. 2001. "The Future of Canada's Water." *The Western Producer*, Saskatoon, Sask (October 24)

<[http://www.producer.com/articles/20010906/special\\_report/20010906h2ofuture\\_main.html](http://www.producer.com/articles/20010906/special_report/20010906h2ofuture_main.html)>

<sup>23</sup> Owens, Dennis 2001. "Water, Water Everywhere, but Canada Won't Sell It" *The Wall Street Journal* (August 31)

## VI. Concerns of Canadian Opponents to Bulk Water Exports

### A Canadian NGO Spearheads the Anti-Bulk Water Export Campaign

In Canada, there exists a strong opposition to exporting bulk water. The opposition is spearheaded by a loud and powerful coalition of Canadian non-governmental organizations (NGOs), named Water Watch. Water Watch serves as the public voice for opponents to bulk water exports. The public debate in Canada on exporting water is often very emotional. Aside from the previously mentioned legal issues and trade obligations, the underlying concerns for Water Watch are:

- Commodification<sup>24</sup> of water
- Large scale out-of-basin water transfers
- Climate Change
- National security
- Trade in bulk water offers minimum economic benefit to local economy
- National identity

### Commodification of water

Water Watch believes that water requires a certain amount of government regulation and stakeholder participation. Allowing water to be exported means treating water as a commodity. As soon as water becomes a commodity under NAFTA, Water Watch fears this might lead to the requirement that their resources be tapped to provide fresh water for the rest of the world at the expense of their own people and environment.<sup>25</sup>

Another concern is that if water becomes a commodity, it becomes an economic good. However, water also holds some significant benefits and costs – namely cultural and ecological – which cannot be quantified through cost/benefit analysis or other quantitative tools. For example, the ecosystem services provided by healthy rivers and coastal habitat demonstrates an ecological value of water. A creek that serves as a private bathing place for First Nations ceremonies or initiation rites demonstrates a cultural value of water.

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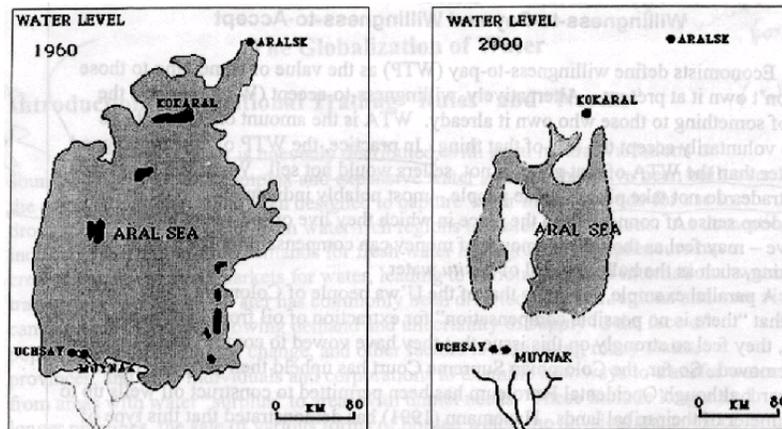
<sup>24</sup> “Commodification” is the process of converting a good or service formerly subject to many non-market social rules into one that is primarily subject to market rules. Gleick, P., Wolff, G., Chalecki E., Reyes, R. 2002. “The New Economy of Water: The Risks and Benefits of Globalization and Privatization of Fresh Water”, Pacific Institute for Studies in Development, Environment, and Security.

<sup>25</sup> Council of Canadians 1999. *Stop Water Exports: Put a Cork in the NAFTA*. Campaign Brochure.  
<<http://www.canadians.org/campaigns/campaigns-waterpub.html>>

Thus, Water Watch and other opponents to bulk water exports fear that exporting water leads to the treatment of water as an economic good without considering its social value. Moreover, if treated as an economic good, Water Watch argues that bulk water exports would reach only a few who could afford it, encourage wasteful and unsustainable practices, and discourage much needed global solutions to water shortages.

### Large scale out-of-basin water transfers

Figures 1 and 2: Aral Sea Extent in 1960 and 2000.  
Source: [http://visearth.ucsd.edu/VisE\\_Int/aralsea/aralanim.html](http://visearth.ucsd.edu/VisE_Int/aralsea/aralanim.html)



Although the Aral Sea is located in Central Asia, far from Canada, the figure above nonetheless illustrates how unsustainable water transfers can have a significant impact on watersheds in a short period of time. Subsidized cotton production in Central Asia expanded so much that the inflows of water to the Aral Sea were cut off by irrigation demands, leading to a shrinking of the sea, the extinction of endemic species, and adverse impacts on human health.

Large-scale withdrawals that significantly reduce water quantity of a basin may alter the vegetation, terrestrial biota, nutrient transport between ecosystems, recreational and transportation opportunities, and aesthetic benefits. It can also impact the regional climate and weather services and cause local health problems. Opponents to bulk water exports fear that private markets or trading systems will not consider the benefits of fresh water in situ, resulting in unsustainable water withdrawals as what happened to the Aral Sea.

### Climate Change

Climate change is expected to have a significant impact in British Columbia, including increased flood dangers in some areas, drought in others, and widespread disruption to forests, fisheries and wildlife. Summer droughts along the south coast and southern interior will mean decreased stream flow in those areas, putting fish survival at risk, and

reducing water supplies in the dry summer season when irrigation and domestic water use is greatest.

#### National security

The bulk removal of water from a watershed is a challenge to the long-term security of Canada's water resources. Fresh water is integral to all ecological and social activities, including the production of food and energy, transportation, waste disposal, industrial development, and human health. Further, water issues are diverse, ranging from pollution to the impacts of floods and droughts and, in the long term, effects of climate change on water availability and distribution. For these reason, Water Watch believes that the government should maintain control over its fresh water resources and prevent water from becoming commodified.

#### Minimum Economic Benefit

Another concern of Canadian opponents to bulk water exports is that the trade in bulk water does not involve economic inputs or labor-intensive activities. Although investment is needed to acquire the water, little else is needed. Compared to the value-added bottled water industry, bulk water exports offer less benefit to the local economy.

#### National Identity

Water evokes special feelings among Canadians. Many Canadians attach special heritage value to their water resources. Many think of Canada as a land of great rivers, lakes and snow-covered wilderness. Water has shaped the way of life for many Canadians, most conspicuously First Nations, but also a high proportion of the population whose choice of work, recreation and home is influenced by water bodies and the amenities they offer.

## STAKEHOLDER ANALYSIS

### *Canada's Opposition to Bulk Water Exports:*

#### Prime Minister Jean Chrétien

Jean Chrétien was sworn in as Prime Minister of Canada on November 4, 1993. Mr. Chrétien and his Liberal Party has subsequently won two more majorities in 1997 and 2000. The Prime Minister has considerable power because he controls the House of Commons - much more than the President of the United States who is separate from the elected Congress members. In July 2001, Chrétien spokesman Duncan Fulton has said that there is no uncertainty about Canada's opposition to bulk water exports.<sup>26</sup>

#### Department of Foreign Affairs and International Trade, Minister for International Trade Pierre Pettigrew

The Department of Foreign Affairs and International Trade (DFAIT) is responsible for developing and implementing strategies to promote the Government of Canada's agenda abroad. Two ministers are responsible for the DFAIT: Bill Graham, the Minister of Foreign Affairs and Pierre Pettigrew, the Minister for International Trade. Bill Graham's predecessor, Lloyd Axworthy, announced the strategy in 1999 in conjunction with former Environment Minister Christine Stewart to prohibit the bulk removal of water. Reversal of this policy would require the support of Foreign Affairs Minister Bill Graham and Environment Minister David Anderson. Trade Minister Pierre Pettigrew has not made any public statements regarding bulk water exports, and it is highly unlikely that he would ever give public support to export Canada's water. As Canada's chief trade negotiator, Trade Minister Pettigrew's support would also be necessary in allowing for the trade in bulk water.

#### Environment Canada, Environment Minister David Anderson

On June 11, 1971, Canada became the second country in the world (after France) to establish a formal ministry of environment. Environment Canada's mission is to help make sustainable development a reality in Canada by promoting the integration of environmental, social and economic factors in decision-making at all levels of society. The current Environment Minister is David Anderson, a Liberal Party Member of Parliament (MP) whose constituency is Victoria, British Columbia. Minister Anderson has told the Canadian media that the federal government of Canada opposes bulk water exports.

#### Water Watch

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<sup>26</sup> The Telegram, July 2001. 'No Bulk Water for U.S.: Chretien'.  
<<http://www.pcparty.nf.net/x0107195.htm>>

Water Watch is a Canadian citizen's group coalition that opposes the commodification of bulk, unprocessed water and the privatization of water services. The coalition was formed in 1998 and has held summits since its formation. The NGOs are:

- Council of Canadians (CoC) - Canada's pre-eminent citizens' watchdog organization, comprised of over 100,000 members and more than 60 Chapters across the country. Strictly non-partisan, the Council lobbies Members of Parliament, conducts research, and runs national campaigns aimed at putting some of the country's most important issues into the spotlight. The Council's National Chairperson, Maude Barlow, is often compared to Public Citizen's founder Ralph Nader.
- Canadian Union of Public Employees (CUPE) - Canada's largest union with 485,000 members who work for school boards, hospitals, municipalities, universities, public utilities, retirement homes, day-care centers, children's aid societies, libraries, transit systems, emergency services and other publicly funded employers. CUPE was born out of a merger of two public sector unions in 1963. It has over 70 regional and area offices across Canada with a staff of more than 700 people. Judy Darcy, CUPE's president, has gained national recognition as a skilled negotiator and a passionate, forceful voice for public services and the people who provide them
- Canadian Environmental Law Association (CELA) - The Canadian Environmental Law Association (CELA) is a non-profit, public interest organization to use existing laws to protect the environment and to advocate environmental law reforms. It is also a free legal advisory clinic for the public, and will act at hearings and in courts on behalf of citizens or citizens' groups who are otherwise unable to afford legal assistance. One of its objectives is to increase public participation in environmental decision-making. Executive Director is Paul Muldoon.

#### British Columbia Premier Gordon Campbell

Gordon Campbell is the current Premier of British Columbia and a member of the Liberal Party. Campbell became Premier in 2001 and will remain in office until 2006, unless he decides to step down before then. The premier is the head of the provincial cabinet and it is the premier's responsibility to choose cabinet ministers. A premier shapes the conduct and decisions of cabinet and speaks for the government, regardless of the departmental responsibilities of other ministers. After being elected premier, Gordon Campbell said that bulk water exports will not be on the table for a B.C. Liberal Government.

#### *Canada's Potential Proponents of Bulk Water Exports:*

##### Assembly of First Nations

The Assembly of First Nations (AFN) exists to promote the restoration of the nation-to-nation relationship between the 633 First Nations communities as well as enhance the justice for Canada's indigenous people. The First Nations refer to those people that can trace their ancestry to the aboriginal people that inhabited the land that is now Canada prior to the arrival of Europeans and Americans in the late 18th century. The AFN maintains a high profile on both the Canadian and international scene on such issues as native culture, history, education, acid rain, air/water pollution, and endangered species. The AFN has been actively involved in several areas of great importance, including the Free Trade Agreement with the United States.

Though First Nations do not have an inherent right of self-government within Canada, the Supreme Court of Canada ruled in 1997<sup>27</sup>, that the First Nations have a right to use their traditional lands as they see fit. However, provincial and territorial laws for acquiring permits to withdraw water make no distinction between First Nation peoples and non-indigenous Canadians.

Some First Nation communities have expressed an interest in bulk water exports. For example, on Vancouver island, where the average rainfall measures 8 feet per year, the Kwakwaka'wakw, the Nootka and the Coastal Salish First Nation groups are interested in exporting fresh water from coastal rivers and streams.<sup>28</sup> For First Nations, the choice to export water would be another step toward their development of self-determination. Further, exporting water could be a good source of income for First Nations people. The average income of First Nations people is only 70% of the average income of other Canadians. The household income of First Nations families is 40% lower than the national average (\$21,800 for First Nation families versus \$38,000 for other Canadian families.)<sup>29</sup> Therefore, it is critical to support those First Nation Bands to convince the AFN that it is in the interest of the First Nation communities to export bulk water.

### *U.S. Potential Proponents of Bulk Water Exports*

#### President George W. Bush

In July 2001, at a speech to reporters in Washington, D.C. a week before the Group of Eight Summit, President Bush announced his intention to talk to Canada's Prime Minister, Jean Chrétien, about the possibility of shipping Canadian water to areas of the United States which suffer from water shortages.

#### U.S. Senators Dianne Feinstein D-CA and Barbara Boxer D-CA

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<sup>27</sup> Delgamuukw v. The Queen (1997), 153 D.L.R. (4th) 189 (S.C.C.)

<sup>28</sup> Telephone conversation in March 2002 with Bill Wilson (Hemas Kla-lee-lee-kla), Vice Chief of the Assembly of First Nations and member of the Cape Mudge Indian Band of Comox, British Columbia, Canada.

<sup>29</sup> On-line Edition of the Encyclopedia of British Columbia, First Nations of BC.  
<http://www.knowbc.com/IEBC/Book/F/firstnat.ASP>

U.S. Senators Dianne Feinstein (D) and Barbara Boxer (D) both recognize that as California’s population continues to grow, the demand for water is likely to outpace supply and the state will continue to have difficulty meeting water needs unless major improvements are made to the current system. For example, Senator Feinstein pushed for the passage of a bill she co-authored with Senator Boxer which would designate federal and state funds to improve the CalFed Bay-Delta system, a web of waterways in Central and Northern California that provides drinking water to 20 million people and irrigation water to farmland. Senator Feinstein believes that a water shortage could be the next big crisis in the state unless Californians stop fighting over water and commit to such projects as desalination, water recycling and identifying new water sources.

California Governor Grey Davis

Governor Grey Davis is a stakeholder, since management of water is one of California’s most important issues. Battles between environmentalists, farmers, and growing cities over how to provide enough water to each has rightfully been a concern for California governors for decades. Given the projections for population growth and fewer water sources in California, Governor Davis will need to work to stabilize water supplies for all California water users – environment, agriculture, and people.

U.S. Fish & Wildlife Service

The U.S. Fish and Wildlife Service is the principal federal agency responsible for conserving, protecting and enhancing fish, wildlife and plants and their habitats for the continuing benefit of the American people. This federal agency is a stakeholder, because it ensures that water levels in rivers, lakes and streams maintain a sufficient level to sustain the aquatic environment.

U.S. House of Representatives from the State of California

All members in the U.S. House of Representatives from the state of California have a stake in this issue. California’s low precipitation and growing population make water one of the most critical issues facing the state. The table below shows those House Members whose districts have coastal access and could, therefore, benefit from new water sources transported by marine vessel.

Congressman/woman	District
Capps, Lois (D)	22 <sup>nd</sup>
Cox, Christopher (R)	47 <sup>th</sup>
Cunningham, Randy “Duke” (R)	51 <sup>st</sup>
Davis, Susan (D)	49 <sup>th</sup>
Eshoo, Anna G. (D)	14 <sup>th</sup>
Farr, Sam (D)	17 <sup>th</sup>
Filner, Bob (D)	50 <sup>th</sup>
Gallegly, Elton (R)	23 <sup>rd</sup>

Harman, Jane (D)	36 <sup>th</sup>
Honda, Mike (D)	15 <sup>th</sup>
Horn, Stephen (R)	15 <sup>th</sup>
Issa, Darrell (R)	48 <sup>th</sup>
Lantos, Tom (D)	12 <sup>th</sup>
Lee, Barbara (D)	9 <sup>th</sup>
Millender-McDonald, Juanita (D)	37 <sup>th</sup>
Miller, George (D)	7 <sup>th</sup>
Pelosi, Nancy (D)	8 <sup>th</sup>
Rohrabacher, Dana (R)	45 <sup>th</sup>
Royce, Ed (R)	39 <sup>th</sup>
Stark, Fortney Pete (D)	13 <sup>th</sup>
Thompson, Mike (D)	1 <sup>st</sup>
Waxman, Henry (D)	29 <sup>th</sup>
Woolsey, Lynn (D)	6 <sup>th</sup>

#### House Subcommittee on Water & Power

The House Subcommittee on Water and Power is a stakeholder and potential proponent of bulk water exports from Canada, since the Subcommittee in 2002 has identified water security as a critically important issue in the west. Its priorities for 2002 include: getting California to cut its demand for Colorado River water by about 15 percent over the next 15 years; and assure that California meets its obligation to reduce its demand on Colorado River water.

#### Association of California Water Agencies (ACWA)

The Association of California Water Agencies (ACWA) assists public water agencies throughout California in promoting the development and management of water sources at *the lowest practical cost* in an environmentally balanced manner. Thus, the ACWA is a stakeholder, because new water transported by marine vessel, e.g. water bag, is far less expensive than the demineralizing process that desalination plants perform. It is the largest coalition of public water agencies or districts in the country. Its nearly 450 public agency members collectively are responsible for 90% of the water delivered to cities, farms and businesses in California.

#### Water Transporters

The most economically efficient method to move large quantities of fresh water through the ocean is in huge, sealed fabric bags, also known as 'waterbags'. Only a handful of commercial firms that have perfected the waterbag technology exist, and these firms would be eager to see the development of an international water trade between Canada and the United States. Terry G. Spragg & Associates is the only U.S. commercial firm that has developed a waterbag capable of transporting large quantities of bulk water

through the ocean. The other waterbag firms are based in Europe: Aquarius Water Trading and Transportation, Ltd., and the Nordic Water Supply (NWS) Company.

## POLICY ANALYSIS

### *Analyzing British Columbia's Water Protection Act*

The policy in question for the province of British Columbia is the *Water Protection Act* (hereafter, the WPA). To recap from the policy overview section, bulk water removals are permitted only in containers of 20 liters or less and only if the water is to be used within the province of British Columbia. For example, water may be removed to be placed in bottles in the province for shipment overseas. In other examples, removals between major watersheds of British Columbia are permitted if the project is a small-scale project (less than 10 m<sup>3</sup>/s or 580 acre-feet per day). Also, large-scale projects are permitted within the major watersheds of British Columbia. Moreover, the WPA exempts six registrants who may continue withdrawing water from the province for the purpose of export to the extent of their licenses.

The purpose for this current policy is to 'foster *sustainable* use of British Columbia's water resources in continuation of the objectives of conserving and protecting the environment.'<sup>30</sup> In analyzing whether the WPA fulfills its objective, it is useful to define 'sustainable development'. Canada has incorporated into federal legislation a broad definition of sustainable development adapted from the World Commission on Environment and Development (the Brundtland Commission). The Canadian definition of sustainable development recognizes that development is essential to satisfy human needs and improve the quality of human life but that, to be sustainable, such development must be based on the efficient and environmentally responsible use of all of society's scarce resources - natural, human, and economic.<sup>31</sup>

### *The WPA's Handling of Environmental Costs*

Under the WPA, small- and large-scale water removal projects must undergo a rigorous environmental assessment process pursuant to the *Environmental Assessment Act*, in order to ascertain the impact of the removal on the environment. The process involves public participation, including consultations with First Nations. If bulk water exports from the province were permitted, they could be reviewed under the same assessment process. In this way, the policy would be in step with the principles of sustainable development, since the assessment process addresses the potential impact such exports would have on the environment and allows for the province's Minister of Sustainable Resource Management to reject removal proposals after consideration of the stakeholders' input.

The provincial Ministry of Sustainable Resource Management already has mechanisms in place to protect British Columbia's water supply. For example, monitoring of water flows takes place at more than 500 hydrometric stations throughout the province. Normal

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<sup>30</sup> Minister of Environment, Lands and Parks and Minister Responsible for Multi-Culturalism and Human Rights. Water Protection Act 1995.

<sup>31</sup> The World Bank Group, 2002. Canada & Environment/Sustainable Development.  
<<http://www.worldbank.org/canada/themes/canadaenv.htm>>

water levels and flows in all regions can be easily determined based on years of collected data. This information can be used to predict where and when surpluses exist. For bulk water exports, monitoring can also be used to determine appropriate rates of water removal for a specific project. If incoming flows are in surplus, the surplus can be used. If there is no surplus, water removal for out-of-province exports would not be permitted.

In another example, the Ministry's Water Management Branch places restrictions on streams when any additional use or users of that water might jeopardize the availability of water to others already holding licenses for the same stream<sup>32</sup>, or the availability of water to non-human users. Restrictions are designed to protect water supplies in, and downstream of, a given water body. The types of restrictions vary. For example, in the absence of supporting storage, additional licenses to withdraw irrigation water from a particular river might be prohibited. Other water licenses might contain a minimum fish flow clause, prohibiting licensees from withdrawing water during times of the year when the water flow drops below a specified minimum level required to support fish populations.

Thus, given the province's existing *Environmental Assessment Act*, monitoring capacity, and procedure for restricting water withdrawals, bulk water exports could proceed in an environmentally responsible manner as called for by the Canadian definition of sustainable development.

#### *The Province's Priorities for Water Removals*

As mentioned earlier in the policy overview section, an important condition of a water license to remove water in British Columbia is its priority date. When more than one license has been issued for the same stream, the license with the earliest priority date has first right to available supply, regardless of the size and nature of project. However, this policy runs counter to the principle of the Canadian definition of sustainable development that states that development 'is essential to satisfy human needs and improve the quality of human life' and 'must be based on the *efficient*' use of a society's natural resources.

For example, a registrant with a license dated 1985 to remove water from a stream for use on a golf course or water theme park has indisputable priority over a registrant with a license dated 2002 who plans to export the water to a British Columbia drought-stricken community in need of immediate drinking-water supplies. Clearly, in this example, the more efficient use for the water removal would be for the drought-stricken community. Further, water for the drought-stricken community, as opposed to a golf course, is more essential to satisfy human needs. Thus, priority for allocation of water resources should be based on uses rather than the earliest possible date to be consistent with the principles of sustainable development.

With respect to a future policy on water exports *from* the province of British Columbia, proposals for such exports can be considered after all the needs of the province (residential, environmental, and agricultural) have been met. In Newfoundland, for

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<sup>32</sup> The term "streams" in this context also includes rivers and lakes.

example, the provincial government's water export policy from 1996 until 1999 had set priorities for allocation of water resources across various uses, including export from the province. Domestic and municipal uses had the highest priority. Following them, in order of precedence, are: commercial and industrial, hydropower, recreation, and other purposes. All forms of water export fell into the final category of "other purposes".<sup>33</sup> Compared to the current B.C. priority system by date, Newfoundland's system was more consistent with the principles of sustainable development that provinces use natural resources in an efficient manner. Moreover, Newfoundland's system did not place the province's water resources in jeopardy at the expense of its population; the system rightfully addressed the needs of the province's population before considering export proposals.

Given the abundance of rainfall and high available, renewable water per capita in British Columbia, it is possible to design a water export policy that adheres to the principles of sustainable development and does not restrict the water needs of the province. To illustrate this point, the table below compares the supply of water for just one hydrologic region of British Columbia (Pacific Coastal) with the demand for the entire Province. The supply is expressed in terms of reliable annual flows, and demand is expressed in terms of consumption. Clearly, in British Columbia as a whole, the balance between renewable supplies with consumption is extremely favorable.

**Source: BC Ministry of Environment, Lands and Parks, Water Management Branch, Water Allocation Section data, November 1999**

<b>River Basin Region</b>	<b>Current Reliable Annual Flow (discharge)</b>	<b>1999 British Columbia Consumption (Agriculture, Industry/Commercial, Drinking Water)</b>
<b>Pacific Coastal, British Columbia</b>	<b>396.4 billion cubic meters</b> <i>321 million acre-feet</i>	<b>6.0 billion cubic meters</b> <i>4.8 million acre-feet</i>
<b><i>Water Surplus: 390 billion cubic metres or 316 million acre-feet of water per year</i></b>		

#### *Analyzing the WPA's 20-Liter Container Rule*

The rationale behind allowing water to be exported in containers not larger than 20 liters is to add value to the natural resource, resulting in greater economic benefit to the province. Exporting bulk water is a capital-intensive industry and requires marginal investment in the local labor force and community from where the exporter draws the water. Thus, the container rule encourages deeper investment and provides a way for the province to derive maximum benefit from one of its natural resources.

However, though there is a limit on the size of the container in which water may be exported from British Columbia, this limit has no effect in deterring increases in the

<sup>33</sup> Government of Newfoundland and Labrador, October 2001. *Report of the Ministerial Committee Examining the Export of Bulk Water.*

volume of water licensed to remove for consumption.<sup>34</sup> For example, the following table reveals a staggering increase since 1987 in the volume of water licensed for sale as bottled water. Here, the point is to show that there is not less of an impact to the ecology if water is transported in containers not larger than 20 liters compared to bulk shipments. In any case, water is consumed and is rendered unusable for reuse in the same basin.

Volume of Water Licensed for Bottle Sales		
Year	Volume Licensed (m <sup>3</sup> /yr)	Cumulative Total (m <sup>3</sup> /yr)
1972	13,267	13,267
1973	0	13,267
1974	0	13,267
1975	0	13,267
1976	0	13,267
1977	0	13,267
1978	0	13,267
1979	0	13,267
1980	0	13,267
1981	0	13,267
1982	0	13,267
1983	0	13,267
1984	0	13,267
1985	0	13,267
1986	0	13,267
1987	214,300	227,567
1988	132,667	360,234
1989	14,925	375,159
1990	0	375,159
1991	1,301,795	1,676,954
1992	622,508	2,299,462
1993	82,917	2,382,379
1994	124,375	2,506,754
1995	66,333	2,573,087
1996	0	2,573,087
1997	1,691,504	4,264,591
1998	101,159	4,365,750
1999	818,389	5,184,139

**Source:** B.C. Ministry of Environment, Lands, and Parks,  
Water Management Branch, Water Allocation Section data  
Nov. 1999

The table shows data for surface water only, since groundwater is not licensed (though it too may be used for bottled water and other purposes).

### *Resource Royalty<sup>35</sup> Benefits for the Province*

<sup>34</sup> Consumption refers to that portion of water withdrawn that is evaporated, transpired from plants, incorporated into products or otherwise lost, and thus is not available for further use in its natural basin. For example, water taken from a basin in bottles, beverages and slurries are consumptive uses, representing a loss to the basin.

<sup>35</sup> A royalty is a payment of a right to the province from a corporation or individual to exploit specified natural resources.

Royalties are the most significant benefit to British Columbia from bulk water exports. British Columbia has already developed fees for exporting water in bulk *within* the province. A similar or identical fee schedule could be developed for out-of-province exports. According to British Columbia's fees and rental schedule of May 1999, there is a CDN \$10,000<sup>36</sup> one-time fee for bulk shipment of more than 1,000 afy; the fee is \$5,000 for less than 1,000 afy. The annual fee is \$1,350 for 100 acre feet, plus \$13.50 for each additional acre foot beyond 100 acre feet, or \$0.01 per m<sup>3</sup>. In this fee schedule, revenue to the province in the form of royalties is dependent on the volume of sales.

Additionally, the B.C. government could use the revenue from out-of-province bulk water exports to advance the province's sustainable development goals. For example, the revenue from such exports could be directed to improve damaged water resources in British Columbia, such as wetlands. Healthy wetlands are critical to a variety of birds and animals and to the recharge of fresh groundwater supplies. If the policy on bulk water exports included a provision requiring a portion of the revenue from such transactions to be used toward the improvement of water resources in British Columbia, it would be a prime example of sustainable development.

A good place to start in designing such a policy is the Annex-2000 of the Great Lakes Charter, which Governor John Engler of Michigan drafted. The intention of the Annex is to protect the Great Lakes basin from export and diversion proposals. (Recall that only one percent of the water in the Great Lakes can be recharged through the hydrologic cycle.) The standard in the Annex lays out the basic guidelines that would be used for assessing proposed new or increased "withdrawals" of water from anywhere in the Great Lakes basin system:

"The aforementioned agreement(s) will include a standard that no State or Province will allow a new or increased withdrawal of the Waters of the Great Lakes basin unless the applicant for the withdrawal establishes that its proposal, together with any existing use being increased: A. Results in an improvement to the Waters and Water-Dependent Natural Resources of the Great Lakes basin; and B. Does not, individually or cumulatively, cause significant adverse impact to the quantity or quality; and C. Includes implementation of all reasonable and appropriate water conservation measures; and D. Complies with all applicable laws."<sup>37</sup>

Environmental groups welcomed the standard because it requires *both* no significant damage *and* improvement to the Great Lakes basin in order to obtain a water use permit. The government of British Columbia could adopt a similar policy with respect to bulk water exports from the province to ensure that such exports contribute to the improvement of the province's water sources and aquatic ecology.

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<sup>36</sup> Prices here are in Canadian Dollars (CDN).

<sup>37</sup> North American Symposium on Understanding the Linkages between Trade and the Environment, October 2000. Elwell, Christine. *NAFTA Effects on Water: Testing for NAFTA Effects in the Great Lakes Basin*, p. 98.

## LEGAL ANALYSIS

Since bulk water has never been exported commercially from Canada, it has no obligation to permit the sale of this natural resource. It can do so if it chooses. However, should a province authorize the sale of bulk water, then the relevant rules of NAFTA and WTO would apply. Once bulk water is extracted from lakes and exported in bottles, containers or tankers, it would be considered a good or product and subject to potential trade consequences under these agreements.

What worries most Canadian opponents of potential bulk water exports are the NAFTA and WTO obligations placed on Canada in respect of trade in goods and investment, i.e. export restrictions under GATT Article XI and NAFTA 309, proportional sharing under NAFTA 315, and national treatment accredited to foreign investors under NAFTA Chapter 11. This section provides an analysis to questions that illustrate those legal concerns of opponents to bulk water exports.

### Question:

If a project to export bulk water from British Columbia is approved by the British Columbia province and subsequently a policy change occurs prohibiting or restricting such exports in the future, can the NAFTA and WTO Parties argue the policy change is illegal pursuant to the NAFTA and WTO?

### Analysis:

Article 309 of NAFTA provides for the treatment of import and export restrictions. It states that “no Party may adopt or maintain any prohibition or restriction on the importation of any good of another Party, except in accordance with Article XI of GATT 1994, including its interpretive notes.” Article XI of GATT 1994 states that Parties to the Agreement may not place restrictions on the export or sale for export of any product with exceptions listed in Article XI:2. The exceptions under Article XI:2 are as follows:

- (a) temporary export prohibitions or restrictions to prevent or relieve critical shortages of foodstuffs or other products essential to the exporting contracting party;
- (b) import and export prohibitions or restrictions necessary to the application of standards or regulations for the classification, grading or marketing of commodities in international trade administration of standards; and
- (c) import restrictions on fisheries products necessary to the enforcement of certain governmental measures.

Of the exceptions listed in Article XI:2, the only applicable exception to this case would be (a). For exception (a), the Canada would have to demonstrate that it has a critical water shortage, i.e. extreme drought, in order to temporarily restrict the export of water.

If a non-NAFTA, WTO Party argued that the Canadian restriction on bulk water exports was illegal, the GATT provides Canada with additional general exceptions from its GATT obligations set out in Article XX. Those exceptions are as follows:

- (a) protection of public morals;
- (b) protection of human, animal or plant life or health;
- (c) importation or exportation of gold or silver;
- (d) securing compliance with otherwise GATT-consistent laws or regulations;
- (e) products of prison labor;
- (f) protection of national treasures of artistic, historical, or archaeological value;
- (g) conservation of exhaustible natural resources;
- (h) intergovernmental commodity agreements;
- (i) price stabilization plans; and
- (j) products in general or local short supply.

Under Article XX(b) of GATT (exception for the protection of life or health), Canada may be able to justify an outright prohibition on bulk water exports to prevent, for example, imminent degradation on a particular water system.

Article XX(g) of GATT (conservation of exhaustible natural resources) could be applicable to any quantitative restrictions imposed for the conservation of water. However, the question arises whether or not surface water qualifies as an 'exhaustible' resource. Clearly, water in most cases is a renewable and, therefore, inexhaustible resource. Thus, in the case of the Great Lakes where only 1% of the water is renewable through the natural hydrologic cycle, the Great Lakes could be considered an 'exhaustible natural resource' within the scope of Article XX (g).

Nevertheless, arguing the justification for export restrictions pursuant to Article XX(g) could prove to be difficult; none of the previous GATT/WTO dispute panel reports that have considered Article XX(g) has upheld a measure as being justified under Article XX. In 1987, for example, Canada invoked Article XX(g) against the U.S. in a GATT dispute regarding a Canadian measure prohibiting exports of unprocessed herring and salmon.<sup>38</sup> The U.S. claimed that the export restrictions maintained by Canada were inconsistent with Canada's obligations under GATT. In the dispute panel's analysis and application of Article XX(g), the panel found that Canada's prohibitions were unjustifiable since they were not primarily aimed at either the conservation of salmon and herring fish stocks or at rendering effective the restrictions on fish harvesting. Rather, the measure in question appeared to have been implemented primarily for the purpose of protecting a domestic processing industry.

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<sup>38</sup> Barutciski and Banicevic. 2000. *Canada – Measures Affecting Exports of Unprocessed Herring and Salmon* (complaint by U.S.), 35<sup>th</sup> Supp. BISD 98 (1987).

Thus, for Canada to successfully invoke the NAFTA's Article 309 or one of the exceptions under GATT's Article XX, the measure taken to restrict bulk water exports must be based on a valid environmental claim.

Question:

Supposing that the province of Labrador and Newfoundland has begun exporting bulk water to a U.S. company. Could the government of Labrador and Newfoundland in the future ever reduce export shipments of bulk water to the U.S. company?

Analysis:

No, NAFTA Article 315 would preclude Canada from ever reducing the proportion of total export shipments of bulk water made available to the company relative to total supply. Further, Article 315 would impose burdens on Canada if the Government of Canada sought to regulate such exports. If, to restrict bulk water exports, the Government of Canada decided to invoke GATT Article XX(g) or Article XI:2(a), it would need to maintain a proportionality between domestic consumption and exports to another NAFTA party over a representative 36 month period prior to the imposition of the measure.

The NAFTA's Article 315 states:

Except as set out in Annex 315, a Party may adopt or maintain a restriction otherwise justified under Articles XI: 2(a) or XX(g), (i) or (j) of the GATT with respect to the export of a good of the Party to the territory of another Party only if:

- (a) the restriction does not reduce the proportion of the total export shipments of the specific good made available to that other Party relative to the total supply of that good of the Party maintaining the restriction as compared to the proportion prevailing in the most recent 36-month period for which data are available prior to the imposition of the measure, or in such other representative period on which the Parties may agree;
- (b) the Party does not impose a higher price for exports of a good to that other Party than the price charged for such good when consumed domestically, by means of any measure, such as licenses, fees, taxation and minimum price requirements. The foregoing provision does not apply to a higher price that may result from a measure taken pursuant to subparagraph (a) that only restricts the volume of exports; and
- (c) the restriction does not require the disruption of normal channels of supply to that other Party or normal proportions among specific goods or categories of goods supplied to that other Party.

Question:

Does NAFTA's Chapter 11 (Investment), namely potential investor-state litigations, impede Canada's ability to control bulk water exports?

Analysis:

Although there is no legal precedent to determine whether a prohibition on bulk water exports could withstand an investor-state litigation or trade challenge, NAFTA's Chapter 11 investment rules are limited by Article 1114(1) of NAFTA which provides as follows:

“Nothing in this Chapter shall be construed to prevent a Party from adopting, maintaining or enforcing any measure otherwise consistent with this Chapter that it considers appropriate to ensure that investment activity in its territory is undertaken in a manner sensitive to environmental concerns.”

Taking Article 1114 into account, there appears to be nothing in Chapter 11 of NAFTA that constrains Canada's control over water exports, as long as the measures Canada takes are to protect the environment as opposed to economic interests.

Article 1110(1) gives NAFTA investors the right not to have their investments nationalized or expropriated except: (a) for a public purpose; (b) on a non-discriminatory basis; (c) in accordance with due process of law; and (d) on payment of compensation.

The following scenario demonstrates how and when the rights of a Mexican or U.S. investor in Canadian bulk water could be violated. Assume that the British Columbia government banned bulk water exports from the province *after* issuing a U.S. or Mexican investor a license or permit to withdraw water from a Canadian stream. Under this circumstance, the investor may seek to exercise his riparian right and claim that the denial of the opportunity to export bulk water is expropriation within the scope of Article 1110. The investment would be entitled to be treated in accordance with Articles 1110 of NAFTA relating to the international minimum standard of treatment and expropriation. Thus, any decision to ban the export of bulk water might involve liability to foreign investors whose investment would be taken away by such a decision.

The issue of potential future claims from investors who have been permitted to export water can be addressed by imposing clear terms and conditions at the initial permit stage specifying the limited activities that are authorized. If the authorizing government deals unfairly with the investor, then it cannot complain if it is subject to a legal challenge under NAFTA.

Question:

Supposing again that the province of Labrador and Newfoundland has begun exporting bulk water to a U.S. company. Does the national treatment provision (NAFTA Article 1102) of the NAFTA trade agreements require that the Government of Canada ensure that no other province, e.g. British Columbia, can refuse to allow an export on terms as favorable than those provided by Labrador and Newfoundland?

Analysis:

Article 1102(1) of Chapter 11 of NAFTA provides:

“Each Party shall accord to investors of another Party treatment no less favorable than it accords, in like circumstances, to its own investors with respect to the establishment, acquisition, expansion, management, conduct, operation, and sale or other disposition of investments.”

Reading this article, it appears that once a province allows a Canadian investor to withdraw water from its natural state for export, the same rights will then have to be accorded to foreign investors.

Article 1102(3) of Chapter 11 of NAFTA provides

“The treatment accorded by a Party under paragraphs 1 and 2 means, with respect to a *state or province*, treatment no less favorable than the most favorable treatment accorded, in like circumstances, *by that state or province* to investors, and to investments of investors, of the Party of which it forms a part.”

Article 1102(3) recognizes the existence of different regulations between provincial and state jurisdictions, and requires, for example, only that in British Columbia a Mexican or U.S. investor not be treated differently from an investor from British Columbia.

Thus, the national treatment provision of the NAFTA requires the Government of Canada to ensure that the Mexican or U.S. investor in a particular province is given treatment no less favorable than a Canadian investor in that same province. So if the Government of British Columbia bans bulk water exports and refuses Canadian investors in British Columbia from exporting bulk water, the same rule applies to U.S. and Mexican investors. If the province of Newfoundland and Labrador allowed water to be exported in bulk for commercial purposes, the Government of Newfoundland and Labrador would be obliged to allow U.S. and Mexican investors to export water from the province.

Question:

Is the 1993 unsigned joint statement regarding natural water resources issued by the Governments of Canada, Mexico, and the United States legally binding?

Analysis:

On December 2, 1993, the governments of Canada, Mexico, and the United States issued the following unsigned joint statement:

‘The NAFTA creates no rights to the natural water resources of any Party to the Agreement. Unless water, in any form, has entered into commerce and becomes a good or product, it is not covered by the provisions of any trade agreement

including the NAFTA. And nothing in the NAFTA would oblige any NAFTA Party to either exploit its water for commercial use, or to begin exporting water in any form. Water in its natural state in lakes, rivers, reservoirs, aquifers, water basins and the like is not a good or product, is not traded, and therefore is not and never has been subject to the terms of any trade agreement.

International rights and obligations respecting water in its natural state are contained in separate treaties and agreements negotiated for that purpose. Examples are the United States-Canada Boundary Waters Treaty of 1909 and the 1944 Boundary Waters Treaty between Mexico and the United States. ’

As the joint statement was unsigned by the three governments, it is not a legally binding agreement. A study by the U.S. State Department describes the use of joint statements in international law:

It has long been recognized in international practice that governments may agree on joint statements of policy or intention that do not establish legal obligations. In recent decades, this has become a common means of announcing the results of diplomatic exchanges, stating common positions on policy issues, recording their intended course of action on matters of mutual concern, or making political commitments to one another. These documents are sometimes referred to as non-binding agreements, gentlemen’s agreements, joint statements or declarations.

## POLITICAL ANALYSIS

The issue of bulk water exports is a highly sensitive political issue in Canada, and there are very few Canadian politicians who will publicly state their support for the export of bulk water. The last time a politician supported it was in Spring of 2001. Premier Roger Grimes (Liberal) of Newfoundland and Labrador stated his intention to challenge the province's anti-bulk water export policy for the purpose of creating a new industry in an impoverished community and using the royalties from such exports to pay full university tuition fees for every student in the province. By October 2001, the Canadian Council of Ministers of the Environment successfully persuaded Premier Grimes against proceeding with his plan.

One way of amending the policies that ban bulk water exports from the provinces is through the support of high-ranking Canadian politicians in the ruling party – the Liberal Party. It was the Liberal Party that was responsible for shaping the current policy, namely the Prime Minister, Environment Minister and Minister for International Trade. The Liberal Party has been in recent power since Chretien's first election in 1993. In Canada's Parliamentary System, the winning party of the 301-member House of Commons forms the government; hence the fact that all the Prime Minister's Cabinet Ministers belong to the Liberal Party. For the past 10 years, support for the Liberal Party support has never dipped below 40% and political pundits foresee few threats on the horizon for the Liberals (there are no term limits in Canada).

However, Prime Minister Chretien, Minister for International Trade Pettigrew, and Environment Minister Anderson have openly stated their opposition to such exports. Furthermore, current B.C. Premier Gordon Campbell, also a member of the Liberal Party, has mentioned that the B.C. Liberal Party does not support bulk water exports from the province. For bulk water exports from B.C. to be legalized, a bill would have to be introduced and passed by the province's Members of the Legislative Assembly (MLAs). Since the Liberal Party is the governing political party of British Columbia, an overwhelming majority of the Members of the Assembly belong to the Liberal Party: 77 Liberals and 2 New Democratic Parties (NDPs). The following table shows current Members of the Legislative Assembly in British Columbia with constituencies that have coastal access from where water could potentially be exported. As the table reveals, each one of these Members belongs to British Columbia's Liberal Party which opposes bulk water exports.

<i>Constituency</i>	<i>Member</i>	<i>Party</i>
Alberni-Qualicum	Gillian Trumper	Liberal
Comox Valley	Hon. Stan Hagen	Liberal
Cowichan-Ladysmith	Hon. Graham Bruce	Liberal
Delta South	Val Roddick	Liberal
Esquimalt-Metchosin	Arnie Hamilton	Liberal
Malahat-Juan de Fuca	Brian Keer	Liberal
Nanaimo	Mike Hunter	Liberal

Nanaimo-Parksville	Hon. Judith Reid	Liberal
North Coast	Bill Belsey	Liberal
North Island	Rod Visser	Liberal
Oak Bay-Gordon Head	Ida Chong	Liberal
Powell River-Sunshine Coast	Harold Long	Liberal
Saanich North and the Islands	Hon. Murray Coell	Liberal
Saanich South	Susan Brice	Liberal
Richmond Centre	Hon. Greg Halsey-Brandt	Liberal
Richmond Steveston	Hon. Geoff Plant	Liberal
Vancouver-Burrard	Lorne Mayencourt	Liberal
Vancouver-Point Grey	Hon. Gordon Campbell	Liberal
Victoria-Beacon Hill	Jeff Bray	Liberal
West Vancouver Capilano	Ralph Sultan	Liberal
West Vancouver Garibaldi	Hon. Ted Nebbeling	Liberal

Therefore, given the Liberal Party's popularity and strong opposition to bulk water exports, it seems highly unlikely that high-ranking politicians representing the Liberal Party will amend current federal and/or provincial legislation to legalize such exports in the near future.

One of the opposition parties to the Liberal Party that interest groups could lobby to support legalizing bulk water exports is the Canadian Alliance. The Alliance position is one of classic laissez-faire liberalism, and it supports the policy of economic integration with the U.S. However, the Alliance is losing popularity, and it hardly can be considered a national alternative to the Liberal Party.

Nevertheless, a key figure within the Canadian Alliance who might support legislation for bulk water exports is Member of Parliament John Reynolds. In the late 1980s, Reynolds supported developing a bulk water exporting industry when he was British Columbia's Minister of Environment. MPs can influence legislation through debates in the House of Commons and during all-party committee meetings to examine legislation. As MPs are expected to "toe the party line," interest groups could lobby key MPs of the Canadian Alliance, such as Reynolds, to support introducing legislation that would amend and support bulk water exports with the objective that other party members will follow suit. Members of Parliament can introduce legislation of their own, called "private members bills," however it is rare that a private members bill passes.

The following table shows the British Columbia MPs with constituencies that are located along the coast and who are not members of the Liberal Party. Therefore, these MPs, along with Reynolds, could be influenced to become potential supporters of bulk water exports. To gain public support for such exports and to appease B.C. environmentalists, MPs could develop a policy in which a percentage of the proceeds from the sale of bulk water would be channeled into a fund set aside for the preservation of wetlands - an integral component of natural water resources that provides a variety of ecological

functions both to the natural ecosystem and to humans, such as groundwater recharge, flood control, and outdoor recreation.

<i>Constituency</i>	<i>MP</i>	<i>Party</i>
Delta South Richmond	John Cummins	Canadian Alliance
Esquimalt-Juan de Fuca	Keith Martin	Canadian Alliance
Nanaimo-Alberni	James Lunney	Canadian Alliance
Nanaimo-Cowichan	Reed Elly	Canadian Alliance
Skeena	Andy Burton	Canadian Alliance
Vancouver Island North	John Duncan	Canadian Alliance
West Vancouver—Sunshine Coast	John Reynolds	Canadian Alliance

However, that the Alliance is losing seats in the House of Commons as well as its voter base, it is doubtful that the party would support an idea that is so politically unpopular and could possibly contribute to its demise.

Since amending British Columbia's ban on bulk water exports proves to be extremely difficult within the Legislature, the best way, albeit difficult, is from the outside, namely through the province's Recall and Initiative Act. Under this law, the proponent for an initiative must be an individual. Societies, political parties, and individuals who financially support the initiative must register as "sponsors". "Opponents" of the initiative must also register. Signatures must be collected on petition sheets specific to each provincial electoral district, and a registered canvasser must witness each signature. Canvassers have three months to collect signatures. A total of 10% of the registered voters in every constituency (about 200,000 voters province-wide) must sign the petition.

The proponent for the initiative would obviously be representative of societal groups that would stand to benefit financially from the export of bulk water, such as the indigenous First Nation Bands who live along British Columbia's coastal streams. Since the proponent for an initiative must be an individual, he should be a well-known and respected figure by both voting members of First Nation Bands and non-First Nation peoples. The ideal proponent for such an initiative is Bill Wilson (Hemas Kla-lee-lee-kla), a member of the Cape Mudge Indian Band of Comox on Vancouver Island, who has openly stated that those First Nations who wish to sell and export the water that falls within their jurisdiction should have a right to do so.<sup>39</sup>

Wilson has more than four decades of involvement in articulating aboriginal rights concerns. In the early 1990s, Wilson served as Chairman of the First Nations Congress and provided leadership to help bring the federal and provincial governments to the negotiating table. At a national level, he has served as a Vice Chief of the Assembly of

<sup>39</sup>Telephone conversation in March 2002 with Bill Wilson (Hemas Kla-lee-lee-kla), Vice Chief of the Assembly of First Nations and member of the Cape Mudge Indian Band of Comox, British Columbia, Canada

First Nations and since 1997, he has served as a senior advisor to the National Chief on B.C. issues.

On the U.S. side, water shortages are neither a Republican nor Democrat issue, but rather a problem for all politicians whose constituents live in areas where water shortages are common. Naturally, those politicians include U.S. Senators of California, Dianne Feinstein (D) and Barbara Boxer (D), as well as House Representatives with constituencies in the American Southwest. In July 2001, even George W. Bush announced informally to the Canadian and U.S. press media his interest to import bulk water from Canada.

Due to the sensitivity of the issue of importing bulk water from Canada, it would be wise for U.S. politicians to refrain from making any official overtures to the Canadian government to amend the provincial legislatures. However, parties interested in developing the bulk water industry, such as water bag companies, can inform the relevant high-ranking politicians in the U.S. of the merits of water transfers versus desalination and dam building.

Apart from Senators Feinstein and Boxer, the Chairman of the House Subcommittee on Water and Power, Rep. Ken Calvert is another key politician who would be a potential proponent of bulk water exports to the U.S. As Chairman of the Subcommittee on Water and Power, Rep. Calvert has an interest in balancing the need for additional water supply to meet the rapidly growing population in the West while maintaining environmental resources.

## COMMERCIAL AND ECONOMIC ANALYSIS

The first part of the analysis shows the cost of imported water compared to other alternatives. The second part highlights the commercial benefits for the exporter, in this case First Nation Bands and the government of British Columbia.

### *Cost of Imported Water*

The price of water is usually “free” at the source. The only cost involved is the cost of transporting it from the source to the point of use. It is at this stage that water achieves its value in a commercial sense. Typically the costs relating to infrastructure are low and can be afforded by many public utilities. The cost of transporting water in part depends on the transport technology. There are four different ways that are currently being used to transport water overseas. They are:

- barges;
- tanker ships;
- undersea pipelines; and
- water bags;

Barges and small tankers are used to export small amounts of water short distances. Barges routinely supply water to islands in the Bahamas, and small tankers occasionally deliver water to Japan, Taiwan, and Korea. During the Gulf War, American troops were supplied with water shipped in from Turkey. Given the high daily costs associated with barges and tanker ships, about \$35,000 per day for tankers<sup>40</sup>, the total cost of providing drinking water in most cases exceeds the cost of leading water supply alternatives.

The cost of building and operating a pipeline is also extremely expensive relative to several alternatives, such as desalination, conventional dam and reservoir development, and water marketing.

However, the most cost-efficient method of transporting water to date is the use of huge water bags towed by sea-going tugs. Fresh water is lighter than seawater so the bags float just below or at sea level. The bags range in size from 750 cubic meters (198,129 gallons) to 17,000 cubic meters (4.5 million gallons). Currently, a handful of companies are tugging water in bags; the total cost of water delivered using this technology runs for approximately USD \$800-\$1000 per acre-foot, which is typically cheaper than the total cost of desalinated water. A UK-Greek joint venture was the first company to commercially deliver water with bags. Since 1997, it has been hauling 250 acre-feet of water per year from Greece to the island of Aegina in the Mediterranean Sea.

Economically, water bags companies must be able to provide reliable water at a price below the marginal cost of alternatives, particularly desalination. For the U.S., this

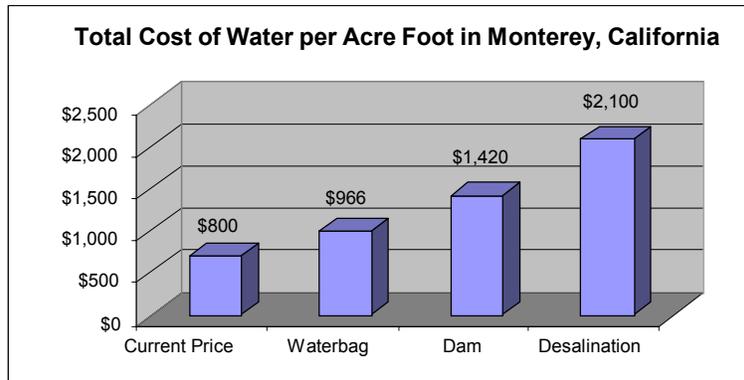
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<sup>40</sup>See daily tanker rates at Intertanko <http://www.intertanko.com/>

means a commercial system will have to be able to deliver water for under USD \$2,100 per acre-foot.<sup>41</sup>

Most cost estimates from water bag companies remain proprietary, but some information is available. According to data provided by water bag developer Terry G. Spragg and Associates,<sup>42</sup> the total cost of delivering water by bag a distance of 800 miles<sup>43</sup> would run about USD \$966 acre-foot per year.

To understand how much less expensive it is to rely on imported water instead of desalinated water or water provided from a dam, consider the situation in Monterey, California. Cal-Am, the major water purveyor for the residents of the Monterey Peninsula, currently charges \$800 per



acre-foot. Cal-Am’s proposal to supply residents with new water generated from building a new dam on the Carmel River would cost \$1,420 per acre-foot. While taxpayers on the Monterey Peninsula have already voted against building another dam and reservoir on the Carmel River, the building of a desalination plant has yet to come to a public vote. If the local water board agreed to a desalination plant, the cost per acre-foot using this method would run about \$2,100. Thus, if Monterey imported water using the water bag technology, as opposed to building a desalination plant, the savings per acre-foot would be \$1,134.

Question: How much would Monterey Peninsula residents save annually if their water were delivered by bag as opposed to desalination?

Answer: Savings per acre-foot multiplied by the number of acre-feet delivered per year equals = amount Monterey Peninsula taxpayers save annually. Therefore, 1,134 x 17,000<sup>44</sup> = \$19.3 million. Thus, Peninsula residents would save nearly USD \$20 million per year from using water bag technology instead of desalination.

There are other factors associated with building and operating a desalination plant that are difficult to quantify in monetary terms. Two important ones are (i) energy intensity,

<sup>41</sup> Data on the cost to produce water from desalination in Santa Barbara provided by California Coastal Commission, ‘*Seawater Desalination in California*’. [http:// www.coastal.ca.gov/desalrpt/dchap1.html](http://www.coastal.ca.gov/desalrpt/dchap1.html)

<sup>42</sup> For more information on the Spragg Bag™, see Terry G. Spragg and Associates [www.waterbag.com](http://www.waterbag.com)

<sup>43</sup> The approximate distance from British Columbia, Canada to Monterey, California, USA

<sup>44</sup> 17,000 is the approximate amount of water in acre-feet that Monterey Peninsula residents consume per year.

leaving it vulnerable to higher energy prices and disruptions and (ii) waste generation. In some cases, land costs can also be an important factor since plants take a lot of space.

*Case Study – Santa Barbara, California*<sup>45</sup>

The city of Santa Barbara's desalination facility provides an edifying case study to help demonstrate some of the economic issues that arise from desalination plants. Santa Barbara had been experiencing severe water shortages resulting from the statewide drought and was in need of a new water source. After an exhaustive review of alternatives, including importing water by tanker ship from British Columbia, the City Planning Commission and California Coastal Commission approved the development of a desalination facility. The cost of the desalination plant was \$34 million. The facility operated for three months in 1992 to allow components testing but was then placed on long-term standby due to increased reservoir supplies replenished by rainfall. The plant has been on standby since then. Maintenance costs for the City of Santa Barbara are \$775,000 annually to keep the plant on standby status. Should the City of Santa Barbara decide to re-activate the facility, the projected cost to do this would be \$2.9 million.

*Commercial Benefits for the Exporter*

In 1991, when the City of Santa Barbara considered contracting the Canadian-U.S. joint venture, Snowcap-Sunbelt Water Inc., to provide the city with bulk water, the Canadian firm Snowcap determined the potential benefits of the contract. Although the joint venture would have transported the water by tanker ship (water bag technology was still in its infancy at that time), the increase in employment that Snowcap determined as a result of the contract could be used as an estimate today in a similar contract for a water bag firm. The reason for this is that the technology for harvesting water, where the majority of jobs in bulk water exporting exist, has changed little over the past decade.

Using Snowcap's analysis, it appears that the commercial impact in terms of jobs created would be insignificant, because of the fact that the bulk water exporting industry is capital-intensive, rather than labor-intensive. At the time of joint venture's proposal, the British Columbia firm Snowcap employed 20 people. According to Snowcap's estimates, the contract to export bulk water would have expanded the company's operations by 30 people. However, the profit for Snowcap would have been substantial if the City of Santa Barbara had contracted the joint venture to provide the proposed 15,000 acre-feet per year of new water; the gross revenue to Snowcap alone would have been USD \$105 million.<sup>46</sup>

Snowcap also calculated the substantial expenditures for terminal facilities in British Columbia and the provision of tug assistance: approximately USD \$4 million.<sup>47</sup> A

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<sup>45</sup> Data for this case study provided by the California Department of Resources.  
<http://resources.ca.gov/ocean/97/Agenda/Chap5Desal.html>

<sup>46</sup> Paley, Fred. "Bulk Water Export Benefits for British Columbia" from the 1992 conference *Should Canada's Water Be For Sale?* Canadian Water Resources Association.

<sup>47</sup> Ibid.

positive spillover effect of constructing more terminal facilities in the province would be to transport its own water to a troubled British Columbia location should an emergency occur, e.g. from the Upper Mainland to the Lower, Nanaimo or the Provincial capital, Victoria.

Although exporting bulk water would not lead to significant increases in jobs created within the industry, the province of British Columbia would receive substantial benefits. For example, the government of British Columbia could contract an arrangement with a bulk water exporting company in which the former would receive royalties from the export of its water. This revenue could be used to wide the province's tax base and invest in the protection of the environment, e.g. funding for wetland preservation.

Ironically, the State of Alaska, where water exports have been legal for the past decade, has already profited considerably from its contract with a British Columbia company that plans to export water from that state. The following case study illustrates the benefits of this arrangement for one city in Alaska and could serve as a model for future arrangements in British Columbia.

#### *Case Study – Sitka, Alaska*<sup>48</sup>

With Canada clogging the flow on water exports, companies are shifting their focus to Alaska. One such company is the Vancouver, British Columbia-based Global Water Corporation. The company holds a contract with the city of Sitka, Alaska, to export up to 18,500 cubic meters (15 acre-feet) annually for the next thirty years. Global Water has been paying the city of Sitka \$25,000 a year for the past five years for the option to export water. That amount increases to \$75,000 during the sixth year of the option contract. In addition, the city will receive royalties based on a sliding scale ranging from .002 to 3 cents per gallon if and when water is exported.

While there are concerns within the community about selling water, the deal has broad support from most residents. In 1999, a referendum approving the lease agreement for the company's dock passed by a 3 to 1 margin. One reason for the support is that the costs and benefits for exporting water are internalized. In contrast, water exports in Canada have been vehemently opposed because provincial governments were giving away water to companies with no direct returns to local citizens. The acrimony surrounding most exports has been averted in Sitka because the community holds the rights to the water at its source. Since Global Water Corporation must compensate the city for any water it takes, it becomes costly for the local community to say no. The potential payoff for Sitka could be enormous, reaching as much as several million dollars a year. For local citizens this translates into lower property taxes, better roads, and improved municipal recreational opportunities.

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<sup>48</sup> Data for this case study is based on the November 1998 article "Exporting Alaska's Water" *Alaska Business Monthly*, p. 78

## STRATEGY

In dealing with a politically sensitive issue, the United States would appear too aggressive if it approached Canada first to negotiate guidelines for the international trade in bulk water. The initiation must come from Canada. To make this happen, a strategy of coalition building, lobbying, and a media campaign need to be employed to convince the Government of Canada it is in their best interest to export water in bulk. The following outline illustrates the recommended steps of this strategy in chronological order.

### **1. Identify and invite the following organizations (US & Canadian) to establish a coalition, Citizens For Water (CFW)**

*Domestic and International (not an exhaustive list)*

The mission of the CFW Coalition is to provide support in the media campaign to spread the word to the public that bulk water exports are beneficial for communities where the water is harvested as well as for the end user. Support will be provided in the form of writing letters to the editor of major newspapers, making presentations at water board meetings on the benefits of exporting water, and writing letters to their local Congressman/woman, MLA, and/or MP. Here is a list of members whose profiles would be suitable to join the CFW Coalition.

First Nation Bands in Coastal British Columbia:

Kwakwaka'wakw

Nootka

Coastal Salish

Water Organizations:

Association of California Water Agencies

California Farm Water Coalition

Canadian Water Resources Association

Watershed/River Organizations:

Albion River Watershed Association (Northern California)

Carmel River Watershed Council

Carmel River Steelhead Association

Coastal Watershed Council (Santa Cruz, CA)

Friends of the River (California's Statewide River Conservation Organization)

Groundwater Resources Association of California

Chambers of Commerce:

California Chamber of Commerce

Individual Chambers of Commerce along California's Coast, e.g. Monterey Peninsula

Chamber of Commerce, Santa Barbara County Chamber of Commerce

British Columbia Chamber of Commerce

Individual Chambers of Commerce along B.C.'s Coast e.g. Comox Valley Chamber of Commerce, Greater Nanaimo Chamber of Commerce

Water Bag Firms:

Terry G. Spragg & Associates

World Water S.A.

Aquarius

Tugboat Organizations:

International Retired Tugboat Association

National Association of Fleet Tug Sailors

Water Recreation Organizations:

Northern California Marine Association

Recreational Boaters of California

Recreational Boating and Fishing Foundation

Southern California Marine Association

Builders/Developers:

Home Builders Association of the Central Coast

California Building Industry Association

Dioceses in California:

San Diego

Orange

Los Angeles

Santa Barbara

San Luis Obispo

Monterey

San Francisco

California School Districts:

San Diego

Orange County

Los Angeles

Ventura

Santa Barbara

San Luis Obispo

Monterey

Santa Cruz

San Mateo

San Francisco

Marin

Sonoma

Mendocino

Del Norte

## 2. Media Campaign

### *Domestic & International*

Get members of CFW Coalition to write and send ‘letters to the editor’ to newspapers in British Columbia to publicize the benefits of exporting water. Contact journalists and encourage them to write op-ed pieces. Mention the benefits that can be accrued from exporting water in bulk, e.g. funding for wetlands protection, expand the provincial tax base, a step in the direction of self-determination for First Nations Bands. In the articles, allude to the success that has occurred in Sitka, Alaska as a result of that city’s decision to export water. Articles should also highlight that exporting water is ecologically safe and can in fact improve the environment, i.e. fund for ecological preservation. Letters and op-ed pieces should appear in the following B.C. newspapers:

Business in Vancouver  
 Vancouver Province and Sun  
 Globe and Mail (nation wide)  
 The Prince Rupert Daily News  
 Alberni Valley Times  
 North Shore News (Vancouver)

‘Letters to the editor’<sup>49</sup> should be written and sent to California daily newspapers in cities that suffer from serious water shortages, e.g. Monterey. Contact journalists and encourage them to write op-ed pieces for newspapers which frequently herald the merits of desalination for solving water shortages. Articles should focus on how transporting water is far more cost-efficient than the alternatives for producing new water, such building dams and desalination plants. Articles should also illustrate how transporting water is environmentally safer than building dams and desalination plants. Further, articles should also show that water bags can provide water at a rate comparable to the present cost of water, whereas desalinated water is usually 3 times the price. Articles should appear in the following newspapers:

San Diego Union-Tribune  
 Orange County Register  
 Los Angeles Times  
 Ventura County Star  
 Santa Barbara News-Press  
 San Luis Obispo Tribune  
 Monterey County Herald  
 Santa Cruz Sentinel  
 San Mateo County Times  
 San Francisco Chronicle  
 Marin Independent Journal  
 Sonoma-Index Tribune

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<sup>49</sup> See Appendix 2 pg. 65: Sample ‘letter to the editor’

The Mendocino Beacon  
Eureka Times-Standard

### *Water Bag Demonstration*

To bring publicity to the method of transporting water, a demonstration should take place where water bags are towed in two different locations simultaneously. One bag should be towed from Sitka, Alaska to Victoria, British Columbia. The other water bag should be towed from San Francisco, California to Monterey, California. Press conferences should take place at the final destinations/ports of call. Invite TV, radio, and print media journalists.

For the Sitka to Victoria demonstration, the Mayor of Sitka and the CEO of Global Water Corporation would be invited to travel in the tugboat. After the tugboat towing the bag arrives in Victoria, the Mayor of Sitka could address the citizens of Victoria to inform how the city of Sitka has benefited from its contract with bulk water exporter Global Water Corporation.

For the San Francisco to Monterey demonstration, San Francisco Mayor Willie Brown could be invited to ‘walk on water’ for publicity. That is, Mayor Willie Brown could stand atop the water bag while it is floating in the bay under the Golden Gate Bridge. The water bag floats at sea level; the bag is wide and strong enough to allow people to walk on it while it is afloat or being towed.

The water bag demonstrations would be funded through sponsorship. Sponsors such as Coca-Cola, Penzoil, Arm & Hammer, etc. would provide large decals, similar to the type used on formula 1-race cars, to be attached to the water bag. The decals would be visible during TV interviews and media coverage of the demonstration.

In addition to the water bag demonstrations, water bag firms should contact water districts along the California coast to introduce and market their product as an alternative to building desalination plants and dams. Appendix 3 shows a sample letter that can be used to send to each of the water districts along California’s coast, from San Diego to San Francisco.<sup>50</sup>

### **3. Legislative Strategy**

#### *International – Canada*

Following the media campaign, Bill Wilson (Hemas Kla-lee-lee-kla), a member of the Cape Mudge Indian Band of Comox on Vancouver Island, would initiate a petition under the Recall and Initiative Act to put an extra-parliamentary Bill before the British Columbia Legislature to amend the *Water Protection Act* to enable bulk water to be exported from the province in containers larger than 20-liters. (Remember: a petition

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<sup>50</sup> See Appendix 3 pg. 66: Sample ‘letter to the water district’

under the Recall and Initiative Act must be initiated by an individual and cannot be initiated by an organization.)

Petition signature collection period can last no longer than 90 days. For the courtesy of canvassers, the petitioning should not be conducted during the winter season. It is expected that at least 1,000 very good canvassers (collecting 200+ signatures each) will be required. The aim will be to achieve the extraordinarily high bar of 10% voter signatures in every constituency.

#### **4. Recommended Bilateral Negotiation Strategy for the USTR**

*At this point it is assumed that Canada has approached the United States to negotiate how water may be traded in bulk among NAFTA members or, possibly, a 'carve-out' for water under the NAFTA.*

- Let Canada approach the U.S. first to initiate talks/negotiations on the trade in bulk water
- Suggest to Canada that the two governments hold secret negotiations to avoid public protest or include negotiations on water as part of an agenda for trade talks on other issues (so as not to draw too much attention to the water issue)
- Offer the Canadians a proposal which allows bulk water exports to be safeguarded from NAFTA's Chapter 11 investment rules
- Suggest creating a fund to benefit the ecology from where water would be withdrawn (percentage from each bulk water export transaction would be deposited into fund)
- Suggest a third party (example: EU team of consultants) conduct an economic and ecological assessment of bulk water exports in order to provide an objective analysis on the best way to proceed with exporting water

*Invite a mediator*

- Should be a hydrologist who is knowledgeable of the impact from the trade in water as well as of the technology and impact of alternatives used to allocate and/or provide water: desalination, dam, water bag
- Should also be familiar with economics of trading water, how it can benefit a society
- Suggestion for mediator: Terry L. Anderson, Executive Director of Political Economy Research Center (PERC) and professor of economics at Montana State University in Bozeman, Montana. Anderson has written and lectured extensively on water and U.S. foreign policy with respect to the environment.

*During the negotiation*

- Be aware of the history of water transfer proposals to the U.S. from Canada (North American Water and Power Alliance or 'NAWAPA' and Great Recycling and Northern Development Canal or 'GRAND Canal') and why they never came to fruition (these proposals focused on large-scale water transfers and were environmentally dangerous and too expensive)
- Be sensitive to Canadian concerns regarding the trade in water (NAFTA Ch. 11, water is regarded as part of national heritage in Canada)
- Offer an 'escape-clause' in the U.S. proposal, i.e. allow for interruption in the trade in bulk water after satisfactory advance notice
- Stress the economic benefits derived from exporting bulk water
- Allude to successful ten-year history of the trade in water in the Mediterranean

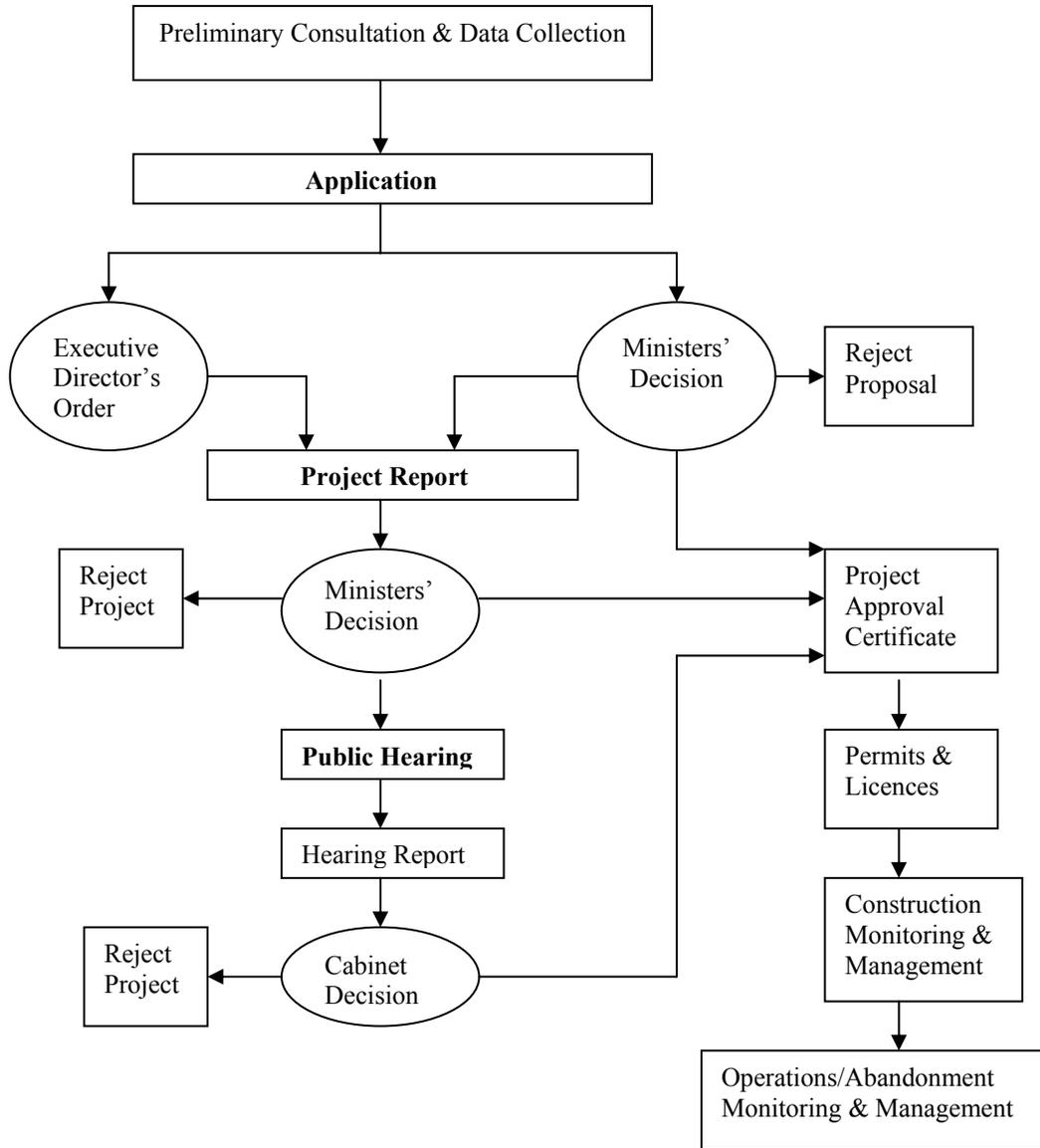
**BUDGET**

It is expected that it will cost approximately USD \$250,000 to succeed. There should be two paid staff beginning full-time work on the Recall and Initiative petition three months prior to the signature gathering period and four paid staff during the actual three-month petition period. An office will be needed. Canvassers cannot be paid. A draft budget is outlined below.

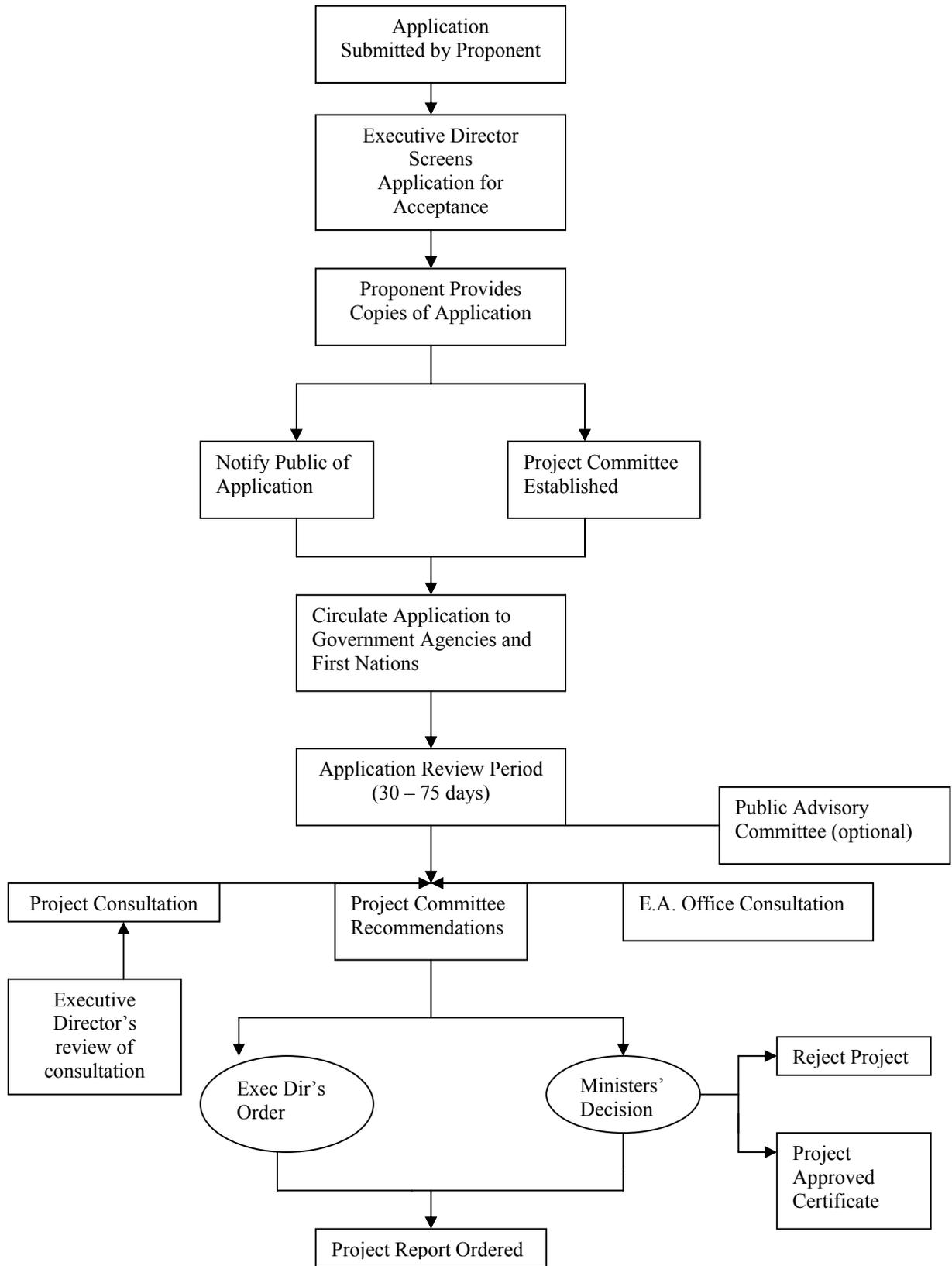
<b>Item</b>	<b>Cost</b>
Salaries (18 months of work @ USD \$2,300/month ea. for 4 workers)	165,600
Printing	10,000
Phone and fax	6,000
Postage and postal fees (includes mail to canvassers)	10,000
Office Supplies	1,000
Office Rent (in Vancouver)	14,400
Travel for the proponent (Bill Wilson and initiative team)	11,000
Advertising (to explain the initiative, recruit canvassers)	18,000
Computers, printers, software	5,000
Contingency	9,000
<b>TOTAL</b>	<b>USD \$250,000</b>

**APPENDIX 1.**

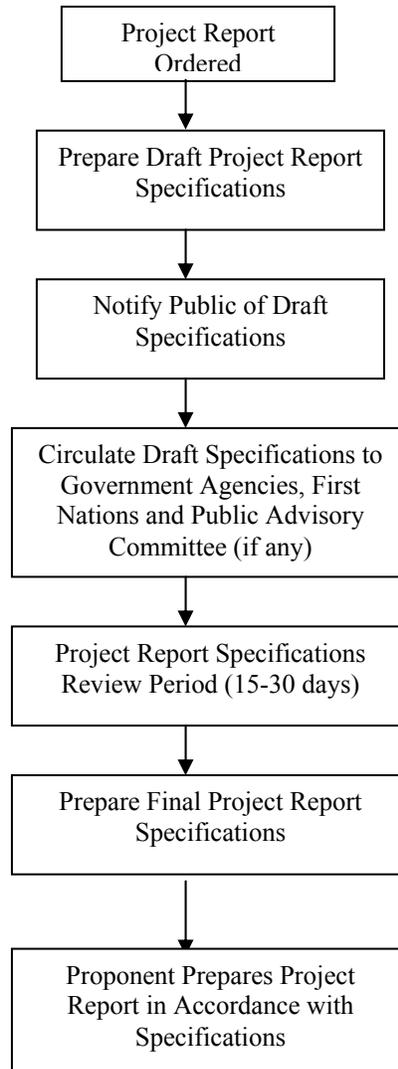
**Outline of the Environmental Assessment Process**



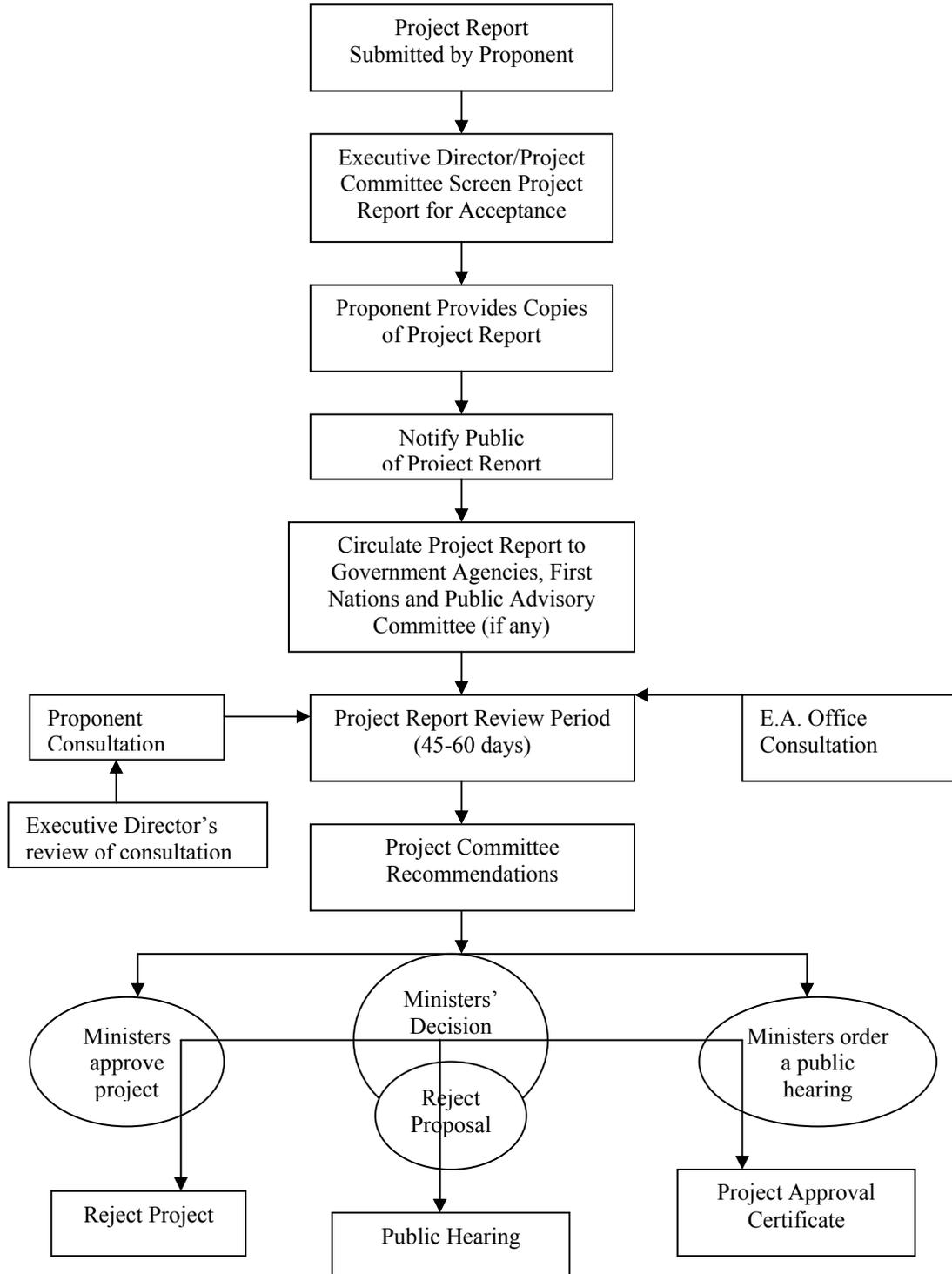
### Reviewing the Application



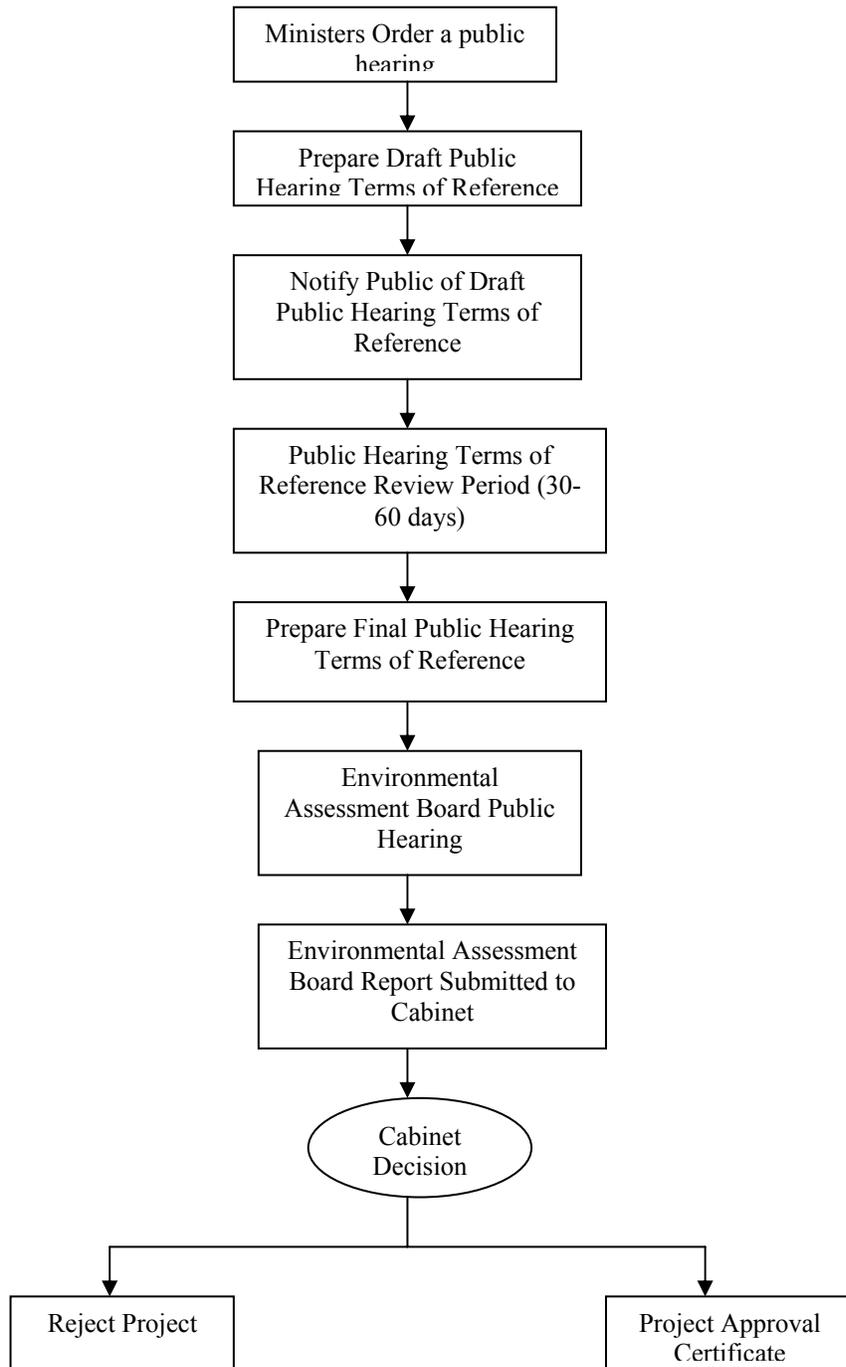
### Preparing Project Report Specifications



### Preparing and Reviewing the Project Report



### Public Hearing



**APPENDIX 2.****Sample Letter to the Editor**

In response to the *Pine Cone*'s June 14 editorial, 'The Cloudy Crystal Ball', the editor concludes that 'if desal is the only practical solution, we say get on with it.' Fortunately, there is another alternative that is more cost-efficient and less ecologically harmful than desalination. Namely, transporting surplus water in nylon bags to the Monterey Peninsula from British Columbia coastal streams flowing into the Pacific Ocean. This is not science fiction – Mediterranean countries such as Greece and Cyprus have been using this alternative for the past decade, because it is cheap, reliable, and doesn't occupy precious land. The fact that these countries haven't switched to desalination speaks for the water bag's success.

Consider the costs of desalination – construction along the coast and brine disposed from the plant into the Monterey Bay would disrupt the aquatic environment; energy costs for pumping water from the proposed Moss Landing site 20 miles away to the Peninsula's existing distribution system would *triple* the cost customers pay per unit of water; finally, the decommission of the plant during average rainfall years would cost Peninsula communities a mint. In 1992, Santa Barbara spent \$34 million to build a desalination plant that was immediately placed on standby following its completion due to increased rainfall. Just to keep the plant on standby status, according to California Resources Agency, the city of Santa Barbara pays \$775,000 annually in maintenance costs. Today, Santa Barbara residents are stuck with an inoperable, expensive desalination plant that occupies precious downtown space. This is a complete waste!

The water bag avoids these high capital costs, since it doesn't require construction of permanent facilities. The water is transferred from the bag to existing storage facilities for treatment and distribution. Additionally, the water bag is 100% efficient, compared to desalination's 15-50%; in other words, desalination produces 15-50 gallons of potable water for every 100 gallons of seawater. The remaining consists of brine and is dumped right back into the ocean.

Let's learn from Santa Barbara's mistake, not repeat it. Choosing the water bag makes economic and environmental sense.

[name, address]

**APPENDIX 3.****Sample Letter to the Water Districts**

[Date]

[Name], General Manager  
[Name of Water Board/District]  
[Address]

Mr. [name]:

Thank you for the opportunity to present you and the City of [name of city] an initial proposal to provide the [name of District] with [amount of water] AFY of fresh water using the most ecologically benign and economically efficient water harvest and conveyance technology yet devised.

Our company has over several years of successful commercial operating experience using tug/bag conveyance in the Mediterranean. We want to point this out so that you will understand that this is a proven technology – not just a concept on paper. In our presentation, we will show you videos of these operations.

Additionally, our bag manufacturer has advanced bag technology a number of generations and has, as a result, just received a federal grant for to further develop water bags. This action recognizes the viability of bag conveyance and its immediate application in the United States.

In our continuing research for water sources along the Pacific coast that can meet the growing demands of coastal communities, we will shortly file for water rights on rivers in British Columbia that will allow even more efficient application to the [name of City] market and other neighboring communities who have approached us. We will advise you of any development in these applications so that you are aware of our efforts to secure and develop secure water sources from which to supply municipalities in California. We bring this to your attention, as we are aware of your concern for secure water sources upon which to make your decisions.

At this moment, we do not have a complete profile of your water needs, although we have been advised that [name of City] needs [amount of water] AFY and residents are currently paying about [market price] per acre-foot for water delivered by [name of water purveyor/distributor]. We also know that there are other alternatives, namely building a desalinization (desal) plant, constructing a dam, and an aquifer/storage recovery strategy. If any of this information is incorrect, please advise as soon as possible.

With this limited amount of knowledge of the alternatives you are considering, we are quite confident that our proposal will be of some interest to you for two reasons. First, our water harvest and conveyance systems are the most ecologically benign ever devised.

Second, our per cubic meter/acre-foot delivery price will certainly be less than desal or construction of a dam and river diversion project. This is absolutely clear if one considers all costs associated with these choices – including ecological costs.

Unlike desal, we do not require a large footprint that consumes valuable beachfront property. Our profile is almost invisible compared to the industrial profile of a large desal plant. We consume but a fraction of the energy that desal will require. We do not generate the solid and liquid toxic wastes that desal does and that you will be required to dispose of. We do not generate the level of air immersions that a desal plant will. And, we will deliver water with less salt than desal will produce, allowing your existing water distribution infrastructure to have a much longer life.

Unlike a dam, we do not take the water from a river's hydrologic system until it enters the sea. This essentially eliminates the significant down stream impacts of dams and does not cause the siltation problems now causing global concern in impoundment structures around the world.

We are certain you are now examining these ecological impacts as they are well known, and we hope that you will consider such costs to the proposed alternatives. But let us suggest that you also consider the security issues posed by both of these “fixed” facilities in light of recent events. Both the desal plant and the dam are potential terrorist targets, and you will need to add a security cost to each of these alternatives. On the other hand, as communities in the Mediterranean have discovered, tug/bag conveyance is not a viable target for terror. If a bag or tug is destroyed, they can be replaced in a matter of hours.

We are also confident that we can deliver the water you need at a far less dollar per cubic meter/acre foot cost than either of these alternatives, and we anticipate proving this to you over the coming weeks.

#### *Security of Water Sources*

It is our experience that a water market expects its water regardless of the weather or the problems a supplier may face. As a result, we design supply redundancies into our projects that anticipate five years into the future for each market. As each source is confirmed, we will keep you apprised.

#### *Water Conveyance System*

As you will see from the videos and photos in our presentation, conveyance by bag/tug is extremely efficient, safe, and not harmful to the environment. We continue to advance bag technology and expect that soon we will be in yet another generation of bags that will further improve their cost effectiveness.

#### *Infrastructure Requirements at Market*

As you can see, we will need some specific information regarding your existing infrastructure and how we may work with you to minimize the cost of moving the water from off shore to a treatment facility. So that we may consider all the necessary costs in our proposals, we request that you provide this information.

#### *Contact Person*

It would be most helpful if you could identify a single contact person for us to work with in the development and articulation of our proposal. This should be someone familiar with your infrastructure as well as your permitting process as it may apply to our efforts.

#### *Cost/Price Variables*

One of the more frustrating parts of our work is the consideration of a wide range of variables in attempting to answer the most critical question, "How much?" As you can imagine, distance is the greatest cost variable along with market price expectations and elasticity. We will work with you over the coming weeks in an effort to project a price per cubic meter/acre foot that we can live within, but there are many cost related variables that we must identify, quantify, and apply to determine what our proposal will be. When we do present a price, it will be connected to specific assumptions upon which it was developed. These assumptions will include all of our required infrastructure costs at water sources and market, capital and operating costs for conveyance, all administrative costs including insurance, all water testing to ensure water quality as will be required by the state, EPA, etc; and length of contract as well as the amount of water to be delivered and when. Although we have much work to do, we are very confident that our costs will be significantly lower than any alternative that has been proposed to date.

We hope this information is helpful. Thank you very much for your time and consideration. We look forward to working with you over the coming weeks and months in solving your pressing fresh water needs.

Best regards,

[name]



**Appendix 4.**

NEGOTIATING CHART

Citizens For Water Coalition: Support bulk water exports

Water bag entrepreneurs and tug boat companies: Support bulk water exports

POTUS, U.S. Senators, U.S. House of Representatives, and California Governor: Support bulk water exports to US

First Nation Bands, Majority of Canadian Public: Support bulk water exports to US provided they are regulated

Canadian environmental NGOs (Water Watch): Oppose bulk water exports

Canadian Prime Minister, British Columbia Premier, DFAIT, and Environment Canada: Oppose bulk water exports

BATNA: Best Alternative to a Negotiated Agreement

PEOPLE	INTERESTS	OPTIONS	OBJ CRITERIA	BATNA
<p><b>Citizens For Water Coalition</b></p> <ul style="list-style-type: none"> <li>• Builders/Developers</li> <li>• Watershed Councils</li> <li>• Water Recreation Organizations</li> <li>• Chambers of Commerce</li> <li>• School Boards</li> <li>• Dioceses</li> </ul>	<ul style="list-style-type: none"> <li>• Build houses, shops, restaurants, hotels, schools, churches</li> <li>• Employment and decent paying jobs</li> <li>• Lower class size</li> <li>• Protection of the natural resources in rivers</li> <li>• Protect aquatic organisms in rivers and tributaries</li> <li>• Reverse environmental damage to rivers from overpumping by water purveyors</li> <li>• Stop the building of dams</li> </ul>	<ul style="list-style-type: none"> <li>• Vote for city council members who support development</li> <li>• Launch media campaign to save endangered rivers</li> <li>• Build coalition with business organizations to pressure water districts to allocate surplus water from outside the district from areas that have an abundance of water</li> <li>• Build coalition with BC NGOs who favor</li> </ul>	<ul style="list-style-type: none"> <li>• Show how people have been forced to move away from their home (Monterey Peninsula) because of a lack of water for affordable housing and development</li> <li>• Show that schools can not be built or remodeled because there is not enough water</li> <li>• Illustrate how dams harm the aquatic environment of rivers</li> </ul>	<ul style="list-style-type: none"> <li>• Relocate</li> <li>• Challenge decisions to build new dams</li> <li>• Look for new water sources that would not have negative impact on the environment of rivers</li> <li>• Water marketing/allocation from agriculture sector</li> <li>• Wait for new premier in BC who favors water exports</li> <li>• Greater conservation</li> </ul>

		<p>water exports</p> <ul style="list-style-type: none"> <li>• Pressure water boards to diversify sources of water, e.g. water transfers &amp; desalination</li> <li>• Educate local water boards &amp; residents about negative impact on the community w/o new water</li> <li>• Launch media campaign with Canadian water export supporters (newspaper ads) in British Columbia on universal benefits of exporting water</li> <li>• Educate local water boards and the public of the economic and environmental costs of desalination, building a dam, and importing water</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how water transfers can mitigate environmental damage, i.e. transfer of water or desalination plant means less pumping from rivers</li> <li>• Show that importing water is ecologically safe (Environmental Impact Review)</li> <li>• Provide an Environmental Impact Report which shows why transfers of water and desalination are far less harmful than building dams</li> <li>• Explain to water boards the importance of business &amp; development, i.e. if business cannot expand = businesses leave town = loss of jobs</li> <li>• Illustrate importance of having a diversity of water supplies, i.e. if desalination plant operations is interrupted by attack or disaster, need a quick alternative</li> <li>• Show importance of water for business operations</li> </ul>	
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<p><b>Water bag entrepreneurs &amp; tugboat companies</b></p>	<ul style="list-style-type: none"> <li>• Enter new markets to export and transport water</li> <li>• Greater profit margins</li> <li>• Expand markets</li> <li>• Increase public awareness and confidence of safety and effectiveness of water transfers</li> <li>• Make water transfers an integral part of water supplies in coastal water districts</li> <li>• Develop international water markets</li> </ul>	<ul style="list-style-type: none"> <li>• Convince environmentalists that water transfers are safe and necessary to mitigate water shortages</li> <li>• Convince environmentalists that water transfers can help reverse natural disasters</li> <li>• Persuade water districts that water bags are cheaper than desalination plants and dams</li> <li>• Persuade water districts that water bags are more suitable than dams and desalination plants in areas that are prone to earthquakes and other natural disasters</li> <li>• Launch media campaign in B.C. and California</li> </ul>	<ul style="list-style-type: none"> <li>• Show successful water bag transfers that are taking place from Turkey to N. Cyprus</li> <li>• Show technology of water bag to prove its safety</li> <li>• Show how water bags are more economical than desalination plants and dams</li> <li>• Environmental Impact Report that shows that water bags have less negative impact on environment than alternative sources, i.e. dams &amp; desalination plants</li> <li>• Environmental Impact Report for British Columbia to prove that water transfer from BC will not negatively affect the environment</li> <li>• Show B.C. government that trade in water, if</li> </ul>	<ul style="list-style-type: none"> <li>• Try to develop water markets on other continents</li> <li>• Wait for election of Canadian premiers who support water exports</li> </ul>

		<ul style="list-style-type: none"> <li>• Prove that trade in water is inevitable</li> <li>• Outreach to First Nations in B.C. – convince First Nations to export water</li> <li>• Negotiate with various agencies (California Coastal Commission, U.S. Army Corps of Engineers, Coast Guard) to allow for stricter monitoring and zero tolerance to ensure that there will be no harmful discharges of gray water or bilge water</li> <li>• Let market forces guide water prices</li> <li>• Get US Senators Feinstein and Boxer to favor water bags as a viable solution to California’s droughts</li> </ul>	<p>done properly, will not make water sources exhaustible</p> <ul style="list-style-type: none"> <li>• Conduct a televised demonstration to prove technology of water bag</li> <li>• Show BC government and First Nations the benefits in exporting their water</li> <li>• Environmental Impact Review to show that tugboats and water bags would not affect underwater sea life any more than fishing boats do already</li> <li>• Show that water bags are more durable during earthquakes and natural disasters than dams or desalination plants</li> </ul>	
<p><b>POTUS, U.S. Senators Barbara Boxer &amp; Dianne Feinstein, Governor Davis</b></p>	<ul style="list-style-type: none"> <li>• Re-election</li> <li>• National security</li> <li>• Robust economy</li> <li>• Maintain good diplomatic relations with allies and neighbors</li> <li>• Fight terrorism</li> <li>• Maintain good trade relations</li> <li>• Maintain good trade</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage Departments of Water Resources to use water recycling as an integral part of their water supplies</li> <li>• Encourage water markets to allow greater allocation within the US</li> <li>• Negotiate with Canada</li> </ul>	<ul style="list-style-type: none"> <li>• Show examples of trade in water around the world</li> <li>• Show importance of US agriculture to its trading partners to emphasize US’ need for abundant amount of water</li> <li>• Show and share technology employed</li> </ul>	<ul style="list-style-type: none"> <li>• Status Quo – allow US Southwest and Southeast to suffer from drought</li> <li>• Encourage coastal regions to build desalination capacity</li> <li>• Seek Congressional funding for: water ‘capturing’ technology, i.e. coastal fog</li> </ul>

	<p>relations with political supporters, i.e. agricultural community</p> <ul style="list-style-type: none"> <li>• Push for free and ‘fair’ trade</li> <li>• High public ratings</li> <li>• Deal with water shortage problem in US and California</li> </ul>	<p>(water-rich neighbor) to import its fresh water in bulk</p> <ul style="list-style-type: none"> <li>• Include a provision in NAFTA to safeguard water from proportionality clause and Chapter 11 investment rules</li> </ul>	<p>by US agricultural community to conserve water (i.e. drip irrigation)</p> <ul style="list-style-type: none"> <li>• Show through sound science that water is a renewable resource and, if traded with care, can remain inexhaustible</li> </ul>	<p>nets; research river diversion proposals; and Alaska-California water pipeline</p>
<p><b>Canadian supporters of water exports</b></p> <ul style="list-style-type: none"> <li>• 4-5 First Nation Bands in BC</li> <li>• 66% of Canadian Public support bulk water exports provided there is government regulation (Globe and Mail Poll)</li> </ul>	<ul style="list-style-type: none"> <li>• Foreign investment</li> <li>• Develop global water markets</li> <li>• Profit from trade in water</li> <li>• Raise income and standard of living</li> <li>• Lower unemployment rate/create jobs in areas that could export water</li> <li>• Develop policies that are in the interest of the respective First Nation Band</li> </ul>	<ul style="list-style-type: none"> <li>• Convince Canadian general public that water exports are safe and would bring in needed investment</li> <li>• Show how investing profits from selling water will lead to increase in employment, create a new industry</li> <li>• Build grass-roots coalition among groups, individuals and politicians who support bulk water exports</li> <li>• Urge Canadian Foreign Trade Minister to seek provision for water under NAFTA to safeguard it from Chapter 11 investment rules</li> <li>• Urge Canadian</li> </ul>	<ul style="list-style-type: none"> <li>• Show plan for Gisborne Lake in Newfoundland: skimming 500,000 cubic meters would lower the lake an inch, but it would be naturally replenished in 10 hours</li> <li>• Show areas in BC where water can be exported: areas where water flows down hill into ocean, no pumping involved, no ecological costs</li> <li>• Success of current water trade between Turkey and Northern Cyprus and among the Greek Islands</li> <li>• Argue that Canada already sells natural resources, such as timber; trees can take as long as 100 years to</li> </ul>	<ul style="list-style-type: none"> <li>• Status quo, no water exports</li> <li>• Wait for drought in US before pushing for pro water export legislation (drought = increased price of water, better investment for Canada and greater demand for water in California)</li> </ul>

		<p>Foreign Trade Minister to establish guidelines for exporting water</p> <ul style="list-style-type: none"> <li>Recall and Initiative Act – collect enough signatures to amend Water Protection Act</li> </ul>	<p>mature in cold climate zones, whereas water can be replenished in a matter of hours</p> <ul style="list-style-type: none"> <li>Show through sound science that capturing water will not affect oceans’ or lakes’ fish stocks</li> <li>Show that Canada’s water supplies are under the domain and purview of the province, thus federal government cannot stop a province from exporting its water</li> <li>Show that trade in water with the US is inevitable</li> <li>Lack of objective criteria for the trade in water means such criteria needs to be established ASAP should a province begin exporting soon</li> </ul>	
<p><b>Canadian Prime Minister, B.C. Premier, DFAIT, Environment Canada</b></p>	<ul style="list-style-type: none"> <li>Re-election</li> <li>Maintain good relations with the U.S.</li> <li>Encourage more foreign investment</li> <li>Promote sustainable development to other developed countries</li> <li>Avoid controversy</li> </ul>	<ul style="list-style-type: none"> <li>Status quo</li> <li>Maintain that Canada’s water is not for sale</li> <li>Prime Minister and DFAIT can argue that water is under the jurisdiction of provinces, therefore</li> </ul>	<ul style="list-style-type: none"> <li>Tout the ‘success’ of its current three-prong strategy: Accord, Joint Reference with U.S. to IJC, Ban on bulk water exports from Great Lakes Region</li> <li>Bulk water has not yet been exported by</li> </ul>	<ul style="list-style-type: none"> <li>Seek a carve-out from NAFTA for water</li> <li>Back out of NAFTA</li> <li>Negotiate a high premium for bulk water from Canada</li> </ul>

		<p>federal government cannot negotiate on such matters</p>	<p>marine vessel, therefore it is not a commodity available for export</p>	
<p><b>Canadian citizen and environmental NGOs</b></p> <ul style="list-style-type: none"> <li>• Water Watch coalition: Council of Canadians (CoC), Canadian Union of Public Employees (CUPE), &amp; Canadian Environmental Law Association (CELA)</li> <li>• farmers/agriculture community</li> <li>• First Nations who oppose bulk water exports</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable development</li> <li>• Protect environment</li> <li>• Do not let market forces determine water prices</li> <li>• Support implementing federal ban on water exports</li> <li>• Stop the commodification &amp; privatization of water</li> <li>• Protect national sovereignty</li> <li>• Support government regulation to intervene in marketplace</li> <li>• Stop US ‘encroachment’ into Canada</li> <li>• Promote water conservation, protection of water quality and healthy aquatic ecosystems</li> <li>• Protect agricultural water supplies in Canada from urban growth</li> <li>• Stop privatization of municipal water services</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen media campaign within Canada to gain more support for passing federal legislation to ban bulk water exports</li> <li>• Form coalition among Water Watch, First Nations bands, and Canadian farmers</li> <li>• Create a rigorous evaluation for any transfer of water to assess the environmental impact</li> <li>• Lobby MPs to create a ‘carve-out’ provision for water in the NAFTA</li> </ul>	<ul style="list-style-type: none"> <li>• <i>British Columbia Water Protection Act 1995</i></li> <li>• Show US subsidization of water for its ag community</li> <li>• CA uses 35% of its water to grow rice &amp; cotton which comprise only 1% of the state’s economic output (therefore, any transfer to CA would be wasteful)</li> <li>• Global warming increases demand for water &amp; affects price for water</li> <li>• <i>British Columbia Conservation Act</i> (‘watershed as a resource management unit’)</li> <li>• Show how the Aral Sea in Central Asia has nearly disappeared because of water diversions</li> </ul>	<ul style="list-style-type: none"> <li>• Lobby Canadian federal government to break its NAFTA commitment</li> <li>• Lobby hard to stop Canada from entering FTAs that would consider water to be a commodity</li> <li>• Push for governmental regulation of water if it must be exported</li> <li>• Push to include <u>all</u> stakeholders in negotiations on water exports</li> <li>• Lobby for legislation that would allow for only short-term water transfer permits</li> <li>• Develop water-pricing scheme that ensures prosperity for Canadians</li> </ul>



**BIBLIOGRAPHY**

Barlow, Maude. 1999. Blue Gold: The Global Water Crisis and the Commodification of the World's Water Supply. International Forum on Globalization. Sausalito, California.

Barutciski, Milos; Banicevic, Anita. 2000. "Water Conservation and International Trade Law: The Phantom Menace?" *Prepared for CLE International Conference on Great Lakes Water Law*. Milwaukee, WI.

British Columbia Ministry of Sustainable Resource Management (formerly the Minister of Environment, Lands, and Parks). *Water Protection Act (1995)*.

<http://srmwww.gov.bc.ca/wat/wrs/protect.html>

Bueckert, Dennis. 2001. "No Bulk Water for U.S.: Chretien." The Telegram. July 2001.

<http://www.pcparty.nf.net/x0107195.htm>

California Coastal Commission. 1997. *Seawater Desalination in California*.

<http://www.coastal.ca.gov/desalrpt/dchap1.html>

Council of Canadians. 1999. *Stop Water Exports: Put A Cork in NAFTA*. Campaign

Brochure. <http://www.canadians.org/campaigns/campaigns-waterpub.html>

Cross, Brian. 2001. "The Future of Canada's Water." The Western Producer. Saskatoon, SK. October 2001.

[http://www.producer.com/articles/20010906/special\\_report/20010906h2ofuture\\_mai\\_n.html](http://www.producer.com/articles/20010906/special_report/20010906h2ofuture_mai_n.html)

De Villiers, Marq. 2000. Water: The Fate of Our Most Precious Resource. Houghton Mifflin Company. Boston.

Department of California Resources. 1997. *Seawater Desalination in California*.

<http://resources.ca.gov/ocean/97/Agenda/Chap5Desal.html>

Department of Justice Canada web-site. *Constitution Acts 1867 to 1982*.

<http://laws.justice.gc.ca/en/const/>

Department of Water Resources, State of California. 1998. The California Water Plan Update. Bulletin 160-98. Sacramento, CA.

Elwell, Christine. 2000. NAFTA Effects on Water: Testing for NAFTA Effects in the Great Lakes Basin. North American Symposium on Understanding the Linkages between Trade and the Environment. Washington, D.C. <http://www.ccc.org/symposium/>

Environment Canada web-site. 2002. *Background Information on Bulk Water Removal and Water Export*. [http://www.ec.gc.ca/water/en/manage/removal/e\\_backgr.htm](http://www.ec.gc.ca/water/en/manage/removal/e_backgr.htm)

Fisheries and Environment Canada. 1978. *Hydrologic Atlas of Canada*.

<http://estat.statcan.ca/HAE/English/modules/module-5/mod-5f.htm>

Gleick, Peter H.; Wolff, Gary; Chalecki, Elizabeth L.; Reyes, Rachel. 2002. The New Economy of Water: The Risks and Benefits of Globalization and Privatization of Fresh Water. Pacific Institute for Studies in Development, Environment, and Security. Oakland, California.

Gleick, Peter H. 1998. The World's Water: The Biennial Report on Freshwater Resources 1998-1999. Island Press, Washington, D.C.

Gleick, Peter H. 2000. The World's Water: The Biennial Report on Freshwater Resources 2000-2001. Island Press, Washington, D.C.

Government of Newfoundland and Labrador. 2001. Report of the Ministerial Committee Examining the Export of Bulk Water.

Great Lakes Charter Annex 2001. Council of the Great Lakes Governors.

<http://www.cglg.org/projects/water/>

Haddad, Brent M. 2000. "Economic Incentives for Water Conservation on the Monterey Peninsula: The Market Proposal." Journal of the American Water Resources Association, Vol. 36, No. 1, pp. 1-15.

Hart, Michael; Dymond, Bill; Robertson, Colin. 1994. Decision At Midnight: Inside the Canada-United States Free-Trade Negotiations. University of British Columbia Press. p. 355

International Joint Commission. 2000. Protection of the Waters of the Great Lakes: Final Report to the Governments of Canada and the United States. <http://www.ijc.org/ijcweb-e.html>

Intertanko. 2001. Daily tanker rates. <http://www.intertanko.com>

Lindsey, Jack B. 2002. Personal communication via telephone and email. CEO Sun Belt Water International, Inc. Santa, Barbara, CA.

Lindstrom, Kris. 2002. Personal communication via telephone and email. Chairman Monterey Peninsula Water Management District. Monterey, CA.

<http://www.mpwmd.dst.ca.us/>

Lysyk, Joanne R. 1999. "Compensation After Delgamuukw." Pacific Business and Law Institute. Conference in Vancouver, BC.

<http://www.delgamuukw.org/perspectives/compensate.pdf>

Monterey Peninsula Long Term Water Supply Contingency Plan. 2002.

<http://www.edaw.com/planb/>

NAFTA Secretariat. <http://www.nafta-sec-alena.org/>

Nathu, Nazlin. 1993. Response to the British Columbia Government's Stewardship of the Water Initiative in Respect of Water Pricing. West Coast Environmental Law Association. Vancouver, BC. <http://www.wcel.org/wcelpub/7510.html>

On-line Edition of the Encyclopedia of British Columbia, First Nations of B.C.

<http://www.knowbc.com/IEBC/Book/F/firstnat.ASP>

Owens, Dennis. 2001. "Water Water Everywhere, But Canada Won't Sell It." The Wall Street Journal. August 31.

Paley, Fred. 1992. "Bulk Water Export Benefits for British Columbia." Water Export: Should Canada's Water Be For Sale? Conference Sponsored by the *Canadian Water Resources Association* held in Vancouver, British Columbia.

Pearse, Peter H; Bertrand, Francoise; MacLaren, James W. 1985. Currents of Change: Final Report. Inquiry on Federal Water Policy. Environment Canada. Ottawa.

Pearse, Peter H.; Quinn, Frank. 1996. "Recent Developments in Federal Water Policy: One Step Forward, Two Steps Back." Canadian Water Resources Journal, Vol. 21, No. 4, pp. 329-340.

Recall and Initiative Act. 2002. "Elections BC – The Recall Process in British Columbia." Pamphlet. <http://www.elections.bc.ca/rcl/rclpam.html>

Spragg, Terry G. 2002. Personal communication via telephone. CEO Terry G. Spragg & Associates. <http://www.waterbag.com/> Seattle, WA.

Swagel, Will. 1998. "Exporting Alaska's Water." Alaska Business Monthly, November 1998. Anchorage, pp. 78-80.

U.S. Geological Survey. 2002. *USGS Water Resources of California*. <http://ca.water.usgs.gov/>

Visualizing Earth UCSD. Aral Sea Graphic. 2001.

[http://visearth.ucsd.edu/VisE\\_Int/aralsea/aralanim.html](http://visearth.ucsd.edu/VisE_Int/aralsea/aralanim.html)

Wilson, Bill (Hemas Kla-lee-lee-kla). 2002. Personal communication via telephone. Vice Chief of the Assembly of First Nations and member of the Cape Mudge Indian Band of Comox, British Columbia, Canada.

The World Bank Group. 2002. Canada & Environment/Sustainable Development.  
<http://www.worldbank.org/canada/themes/canadaenv.htm>