International Rivers and Lakes

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CONTENTS

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I. Water pollution: Commission takes legal action against Portugal for non-compliance with court judgment[1]

The European Commission has decided to send Portugal a so-called "letter of formal notice", a first written warning under the infringement procedure used to ensure that all European Union Member States take necessary measures to comply with judgements of the Court of Justice. The letter was issued to Portugal for failing to comply with a judgement of the European Court of Justice concerning the Community's Dangerous Substances Directive (76/464/EEC) in July. Despite the ruling of the court, Portugal still has not adopted formally and sent to the Commission pollution-reduction programmes for 99 dangerous substances as required by the Directive. Commenting on the decision, Ms. Margot Wallström, Environment Commissioner, said: "Water protection is a key aspect of Community environmental policy and one which is of particular concern to many citizens because their health depends on it. I hope that Portugal will act swiftly to implement the necessary pollution-reduction programmes." (Brussels, 7 December 2001).

II. Bolivia, Potosí: NGO Protests against Legalization of Water Export[2]

Oscar Olivera, of La Coordinadora por la Defensa del Agua y la Vida (Coalition in Defense of Water and Life) has written a letter to Mr.Luis Vasques Villamor, President of Camara de Diputados of La Paz. He requests civil society organizations to sign the letter to oppose legislation that will make possible the export of water from Potosí Department. The letter states that rushing into this law is very risky, as the technical, environmental and social impacts have not been sufficiently studied. Similar laws in other places have produced disastrous effects on people and nature. Instead, Olivera wants to move towards more socially and environmentally sustainable regulatory frameworks.

III. Canada: A Primer on water policy and trade issues[3]

Although the following article deals with water management in one country (Canada), it has been included in the Newsletter because inter-jurisdictional issues in water management are relevant not only at international level, but also in the internal relationships among members of a federation, such as Canada. The article also refers to water as an internationally marketable commodity, a subject of growing importance. Readers will find useful the views and opinions of parties directly involved in the discussion of, and eventually affected by, the commoditization of water. The views expressed are those of the author and do not necessarily reflect the views of the United Nations.

1. Water – the jurisdictional issue

In Canada, freshwater is a resource that falls largely under provincial jurisdiction. The federal government has a say when it comes to navigable waters, federal fisheries, environment and (prior to 1989) international trade. Before signing the Free Trade Agreement (FTA) and the North American Free Trade Agreement (NAFTA), Canada could impose an export tax of any amount and for any reason if it wanted to deter or halt the export of a good; these rights under the General Agreement on Tariffs and Trade (GATT) were relinquished under the newer trade agreements. The Federal Government also shares

[1] *European Water Management News*, Wednesday 12 December 2001.
[2] Water Observatory, 15 Nov 2001 (http://www.waterobservatory.org/news/news.cfm?news_id=212).
[3] Wendy R Holm, P.Ag., *Country Life in British Columbia*, December 2001.

jurisdiction with the United States over Boundary Waters - bodies of water that run along (not across) the international border (principally the Great Lakes and the St. Lawrence Seaway).

2. Water – the governance issue

In general, provinces have the responsibility to manage their share of Canada's water resource in the long-term (e.g. sustainable) beneficial interest of Canadians. Provinces license the right to use water (farmers, municipalities, industry, crown corporations, water bottlers); place a term on the license; charge licensing and withdrawal fees; undertake public works; and enact legislation to protect the health and environmental priorities of communities.

3. Water – the political issue

Provincial interpretation of responsibility with respect to the water resources under their jurisdiction will inevitably vary, consistent with the ideological positioning of the parties in power. Theoretically, conservative governments, which by and large believe capital should drive resource sector decision-making, will tend to favour privatization and exploitation of water as a source of economic revenue. Liberal governments, more supportive of market regulation, will tend to impose outright bans on exports in response to existing environmental concerns. In a pre-NAFTA world, liberal governments might have tried to do both by imposing strict environmental standards and placing water exports under a crown corporation to capture revenues and minimize risk.

In Canada, provincial approaches to the water/trade issue range from British Columbia's outright ban on exports (reflecting the position of the majority of British Columbians) to Newfoundland's recent interest in tanker exports (Premier Roger Grimes' statement that revenues from water exports would be sufficient to finance a free university education for every student in the province).

4. Water – the constitutional issue

As it turns out, Premier Grimes of Newfoundland appears to have overestimated the benefits accruing from water exports. However, assuming a province feels the benefits are substantial and puts in place an evaluation process using community-built and fully transparent environmental/economic yardsticks and IF the public decision process is open, ethical and democratic, and IF the province retains the right to cancel the project outright if it turns out to have been a bad decision, and IF the province has in place an effective mechanism to capture profits and retain control, who is to say that the economic benefits do not justify a foray down this export policy path? Under Canada's constitution, such decisions are meant to be made by the people of the province with jurisdiction over that resource -- in this case, Newfoundlanders.

5. Water – the policy issues

Assuming a federal water policy with authority to ensure strict guidelines (case-by-case, scrupulous process, short-term licenses, small volume exports, continuous re-evaluation against improved measurement criteria), small-scale water exports are within the 'safe' public policy contemplation of the provinces, particularly if undertaken by a crown corporation rather than by the private sector.

Why a crown corporation? It is argued that there is no good public policy reason why the private sector should be involved in a water export initiative. To the extent that significant monopoly/ oligopoly rents accrue to water exporters, if and when exports pass community muster, such profits must go to lining the public's purse, not shareholders' pockets. A crown corporation would also maximize potential revenues, because a monopoly, one-desk supplier would command a higher market price. Similarly, a

crown corporation would minimize public risk by lowering the cost of 'shutting down' if exports prove to be a bad idea, because there are no private sector profit rights to buy out.

6. Water – the crisis

The problem is, under the FTA and the NAFTA, 'safe' public policy contemplation of water exports is almost impossible. NAFTA provisions such as National Treatment, a ban on export taxes, restrictions and prohibitions, agriculture provisions (exempting 22.01.9 -- water -- from the FTA and NAFTA environment provisions) and investor-state dispute mechanisms (Chapter 11) mean that Canada cannot turn off the tap. So long as the buyer wants it, Canada must provide it. If Canada cuts back sales, it has to cut back Canadians by the same amount as Americans and make prices to both the same. If Canada cuts off the Americans, they have to pay compensation. Under NAFTA, Canadians cannot interrupt 'normal channels of supply', and a case-by-case evaluation policy is not even possible. Once a province permits exports, NAFTA's 'best-in-province' treatment rights put the rest of the province's water at risk.

The federal government -- by signing the trade agreements -- has made it impossible for Newfoundland to exercise its constitutional rights in a manner consistent with public policy and, at the same time, has abrogated its (federal) responsibility to act in the breech. Under the trade agreements, Canada gave up its right to embargo water exports through an export tax.

It is fortunate, in a way, that Newfoundland's interest in water exports has brought this all forward. Unfortunately, rhetoric has supplanted reason and the discussion is largely inaccurate. Instead of accepting responsibility to solve the matter (a federal ban on exports until water is exempted from FTA and NAFTA), the federal government is at the same time denying there is a problem and making it far worse. Bill C-6, An Act to Amend the Boundary Water's Act, purports to ban exports "except where permitted" and vests water export licensing authority with the Minister of International Affairs. On a policy level, there is a crisis.

For example, in the case of irrigation, were Canada to decide to undertake an irrigation project to benefit southern Alberta farmers, Americans would be well within their rights under NAFTA to say, "Here's the extra $2 billion our engineers say it will cost to build a bigger dam. American farmers have both an interest and a right in sharing in those irrigation benefits". Water is a good managed by the Crown (e.g. the provincial government) on behalf of the people. Under NAFTA, the Canadian government cannot make that good available to Canadian farmers to the exclusion of American farmers, if American farmers wish to participate. The provinces can, of course, say 'no' to sharing irrigation benefits with American farmers so long as Canadian taxpayers are prepared to fully compensate American farmers and agri-business (NAFTA Chapter 11) for profits denied.

7. Water – the competitive advantage

Water, together with sunshine, soils, seeds and stewardship, is the stuff that food is made of. Canada's ability to sustainably produce food is directly tied to retaining sovereign authority over its water resources. Providing irrigation benefits to American farmers undermines the competitive advantage water provides to Canadian farmers. It also results in displacement of Canadian products in domestic and international markets. British Columbian apple and potato producers have never recovered from the downstream irrigation benefits accruing to Washington farmers under the Columbia Treaty.

8. Water – what must now be done

British Columbia's water export legislation offers little security. It is simply an act of the legislature that can be changed at any time by provincial government's with more conservative agendas or challenged (as indeed is already underway; Sun Belt's Chapter 11 case) by US interests.

The only solution is for the Canadian government to demand an explicit exclusion of water from the goods, services and investment provisions of the FTA and the NAFTA (not a renegotiation but a FIX) and to further advise trading partners that Canada will not allow any existing or future trading agreements to impinge on Canada's sovereignty over its water resources.

Absent such an exclusion, there is no safe path; public policy cannot protect Canada's water resources, and farmers' rights to a sustainable and affordable supply of water for irrigation are at substantive risk.

9. Water – the environment

The above outlines the constitutional jurisdictions of the parties. Canada's community of environmental scientists must work within an existing framework, but the community must have its full say, in the interests of all Canadians. What is needed now is an immediate moratorium on new water export initiatives, until water is exempted from the NAFTA. It remains to open and democratic public policy discussion to determine whether the federal government should bind the province's hands with respect to water exports, and if so, by how much. The only 'safe' options are a strict federal government water export policy framework (small quantity eg, tanker, short term, terminable or renewable at the option of the province) or an outright federal prohibition (prohibitive export tax) on provincial water exports.

10. Water – the resolution

The author suggests that concerned readers may take the following resolution to their next commodity meeting, get it passed, and send it off to Prime Minister Chrétien. The author pledges to document the extent of farmer concern across Canada and follow through with a coordinated response.

Whereas retention of domestic sovereignty over water resources is of critical importance to Canada's farmers; and *whereas* water's inclusion under the goods, services and investment provisions of the NAFTA fully compromises Canadian sovereignty over water resources; *therefore be it resolved* that a letter be sent to Prime Minister Chréien demanding the following actions be taken to safeguard Canada's water resources for current and future generations:

- Canada must immediately demand an explicit exemption for water under the goods, services and investment provisions of the NAFTA (not a renegotiation but a fix);
- In the interim, Canada must place a moratorium on any new water export initiatives until such an exemption is in place;
- Canada must demand an explicit exclusion for water and water related services under the GATS -- currently being negotiated in Geneva -- and the FTAA, so the same mistakes are not compounded (both impose onerous constraints on public policy).

IV. Unprecedented action to protect the Danube River and the Black Sea[4]

[4] European Union, Brussels 23 November 2001. The texts of the declaration and the memorandum are available on the Directorate General Environment web site from 27 November, http://www.europa.eu.int/comm/environment/index_en.htm.

Regional cooperation for protecting the Danube River and the Black Sea was to receive a strong push forward when Environment Ministers of that region meet the European Commissioner for Environment, Ms. Margot Wallström, on 26 November 2001 in Brussels. Ministers were to adopt an unprecedented declaration on water protection in the wider Black Sea Region and to commit to restore the ecosystems and the water quality of one of the most important water basins in Europe. At the same event, two major regional organizations for water protection would for the first time sign a joint agreement to safeguard the Danube and the Black Sea from further deterioration.

The two agreements highlight the European Commission's new environmental agenda for the Danube and the Black Sea region. This area, of increasing significance in the context of an enlarged Europe, suffers from several environmental and health problems, such as excessive nutrient loads and contamination by hazardous substances. So far, however, international efforts have lacked co-ordination and have been insufficient to reverse the situation. The meeting is expected to set common goals and bring different actors of the region into a closer working relationship.

In the declaration, Environment Ministers from the Danube and the Black Sea countries[5] state their aim to improve the water quality of the Danube-Black Sea Region and their wish to strengthen co-operation and pursue regional priorities for water protection and improvement projects. Furthermore, it is expected that ministers will endorse the proposal put forward by the European Commission for establishing an informal Task Force for cooperation on water-related issues in the Danube and Black Sea Region (The DABLAS Task Force).

The two water protection organizations, the International Commission for the Protection of the Black Sea (ICPBS) and the International Commission for the Protection of the Danube River (ICPDR), will sign a joint Memorandum of Understanding. The Commissions agree to cooperate on common strategic goals. "This is a major step forward. The fact that the Ministers and the two Commissions have wanted to come together and adopt these agreements shows that the will and the commitment for this regional cooperation exist. Next, we have to make sure that the agreements will be implemented and not become dead letters", says Commissioner Wallström.

The meeting follows the Commission Communication proposing a set of actions to improve the state of the environment in the Danube - Black Sea region (see press release IP/01/1531 on 31 October 2001). The long-term goal is to reduce the levels of nutrients and other hazardous substances to allow the ecosystems to recover. It is also necessary to improve the coherence and coordination of the available Community assistance mechanisms and to ensure that other policy areas contribute towards environmental protection of the region.

The Danube - Black Sea Region contains the single most important body of water in Europe. The strategic importance of the region will increase with the forthcoming EU enlargement.

Communication from the Commission, "Environmental Co-operation in the Danube - Black Sea Region", (COM(2001) 615 final): http://europa.eu.int/comm/environm55ent/docum/01615_en.htm. The Video "The Danube - a European River" is available free for journalists for non-commercial use on request: http://www.tvlink.org/environment/en/home.htm

[5] Albania, Austria, Bosnia & Herzegovina, Bulgaria Croatia, Czech Republic, FYR-Macedonia, Germany, Georgia, Hungary, Moldova, Romania, Russian Federation, Slovak Republic, Slovenia, Turkey, Ukraine and Yugoslavia.

V. Mexican desert state and US farmers fight for water[6]

CIUDAD JUAREZ, Mexico: Storm clouds are gathering over desert communities on the Mexico-U.S. border, as a Mexican state prepares to siphon water from a reservoir that drought-stricken Texas farmers claim is owed to them.

Chihuahua Gov. Patricio Martinez told Texas officials earlier this month that he plans to lay a pipeline to drain water from the Luis L. Leon Reservoir near Ojinaga, Chihuahua, to the state capital, Chihuahua City. The news came as a shock to Texans, who were in Chihuahua to plead for repayment of about 456 billion gallons (2.07 trillion litres) of water from the Rio Grande border river that is owed under a 1944 treaty to south Texas farmers. Texas officials last week said their farmers need that water. The amount in dispute is more than the seven South Texas counties that receive water from the Rio Grande river consume in one year for irrigation and municipal and industrial use, said Carlos Rubinstein, Rio Grande Water Manager for the Texas Natural Resource Conservation Commission.

A recent study by Texas A&M University showed the gross economic impact of the water shortage on south Texas to be $498 million in lost revenue from farming, industry and other activities. Under the 1944 Mexico-U.S. Water Treaty, Mexico agreed to allow 114 billion gallons (518.2 billion litres) of water to flow annually from Mexican streams and tributaries into the Rio Grande River for use by farmers in south Texas. In return, the United States agreed to divert five times that amount out of the Colorado River and into Mexico each year, and has never defaulted.

Since 1992 however, Mexico has defaulted repeatedly on the Rio Grande agreement and the backlog has grown to today's enormous water debt. The United States and Mexico have been squabbling over the water ever since, with Mexicans saying they cannot repay the debt because they do not have the water to spare and Texans countering that they need it to irrigate 750,000 acres (303,00 hectares) of citrus, melons, cotton, sugar cane and other crops. "We know we have an agreement with the United States, especially Texas, but you pay when you can pay," said Diana Silva, an aide to Chihuahua Gov. Patricio Martinez. Chihuahua City has used large amounts of water to roll back the Chihuahua desert which encircles the city of more than 600,000.

Silva said the pipeline project is still in the planning stages, but construction could begin in June 2002. It is not yet clear how much water will be siphoned out of the reservoir, which is across the border from Presidio, Texas. Silva said the pipeline is intended to provide drinking water for the people of Chihuahua City and surrounding areas. "Our state is very dry right now. We need the water for drinking," Silva said, adding that the water from the proposed pipeline will not be used for agriculture or industry. Halbert said state officials have asked federal officials in both countries to find a solution in order to save many Texas farms from bankruptcy.

VI. War for water: Suez CEO launches appeal[7]

In an open letter published in Le Monde, Gérard Mestrallet, CEO of multinational Suez (http://www.suez.com/), launched an appeal for "Water for all, quickly!" Referring to the link between the

[6] 19 November 2001, Story by Deborah Tedford; Copyright REUTERS SERVICE © Reuters Limited 2001. All rights reserved. Reprinted with permission.

[7] Suez, 6 Nov 2001, http://www.waterobservatory.org/news/news.cfm?news_id=210.

11 September 2001 attacks and the rich-poor divide, he remarked that, "Access to water may be one of the most vital issues involved" and that "We need to find new answers and new forms of solidarity" while doing away "with obsolete misconceptions". Mestrallet stressed that we should concentrate on "the true war for water, the one that insidiously kills thousands of children every day, the one that is waged every day by a billion men and women who have no easy access to the resource". In response to fears that privatization could transform water into a marketable good, Mestrallet emphasized that his company works according to three principles: water is a common good; in developing countries water infrastructures can remain in public hands; and, access to water is a universal right. Public-private partnerships are needed to ensure that the underprivileged gain access to safe water. Suez subsidiary Ondeo provides water services to 115 million people worldwide.

VII. Globalization: NGO warns of mass water sell-off

A Friends of the Earth (FOE) report[8] warns that liberalization of the trade in water services could have a damaging impact on the global environment and poor people's access to a clean, safe water supply. The NGO claims that further liberalization is being pushed through the General Agreement on Trade in Services (GATS), one of the topics discussed at the recent World Trade Organization (WTO) talks in Doha (Qatar). Ms. Hannah Griffiths, Corporate Campaigner for FOE, stated that "Private water companies are among the worst polluters" and that water privatization "…has brought an increase in the price to the consumer, as well as allegations of bribery, corruption and unfair labour practices". The WTO denies[9] that GATS requires the privatization or deregulation of any service. So far no WTO member has made a GATS commitment on water distribution.

VIII. The case of community water law[10]

The stringent demands made by the European Court of Justice for the implementation and enforcement of Community law have not been met by the Member States in numerous cases. In the field of water, it can be stated that there is hardly a single Water Directive which has been or is being implemented and enforced in the required form and to the required deadline.

The causes of these shortcomings, however, are of a political nature only in exceptional cases. Community water law is particularly highly differentiated, in some cases contradictory. The relatively high number of individual directives in specific sectors (surface water, drinking water, groundwater), which are only poorly integrated with one another, clash with highly complex national administrative systems in the Member States. The causes of the implementation deficiencies are, as can be expected, very different from one Member State and one directive to another.

Essentially, the deficiencies can be listed as follows: Programmes are not set up or programmes that are set up are too general; directives are implemented by administrative regulations, programmes and

[8] Concannon, T. and Griffiths, H. (2001). Stealing our water: implications of GATS for global water resources: http://www.foe.co.uk/resource/briefings/gats_stealing_water.pdf;

[9] The WTO is not after your water, http://www.wto.org/english/tratop_e/serv_e/gats_factfiction8_e.htm; Contact: Friends of the Earth, fax: +44-20-74900881, www.foe.co.uk/pubsinfo/infoteam/pressrel/2001/20011102000128.html .

[10] Towards effective environmental regulation: innovative approaches in implementing and enforcing European Environmental Law and Policy http://www.jeanmonnetprogram.org/papers/01/010501-03.html#P102_23638. See also European Court of Auditors, Special Report No. 3/98, OJ C 191/2 of 18.6.1998.

circulars; the required limits are not set; no permits exist or permits are insufficient; regulations are not transformed into national law; community law is not implemented in regions; interpretation of concepts is incorrect; regulations for the enforcing authorities are not legally binding; and parliamentary legislative procedures are lengthy. Other problems include: need for internal reform and social change; climatic situation; deadlines not met; reference to other directives (with longer implementation deadlines); non-compliance with directives because of their integration into the Water Framework Directive (WFD); lack of financial resources; protection areas not precisely defined; too broad interpretation of variation terms; and lack of monitoring activity.

A particularly striking point here is the high number of actions for treaty breaches and judgements of the European Court relating to Directives 76/464/EEC and 80/68/EEC. With regard to these directives there were judgements against six of the 15 Member States; there are also numerous proceedings still pending. There were five judgements against Member States relating to the implementation of the Bathing Waters Directive 76/160/EEC.

In the implementation of Directive 76/464/EEC and its successors the main deficits lay in the fact that the Member States had not given notification of any specific programme for the directive or had given insufficient detail. It is also notable that there was mostly a lack of information on the quality objectives required by the Directive. Finally, there is often a lack of proper implementation of the obligation regarding authorisation. Directive 80/68/EEC was not transformed sufficiently precisely into national law by most Member States. There were also differences in interpretation, and references to existing legislation which do not constitute implementation in line with the directive.

In the case of Directive 76/160/EEC the implementation deficits differed. In some cases it was simply that too few locations were identified as bathing waters. Spain argued in Case C-92/96 that social changes now underway meant that traditional bathing areas were no longer being used as such. It was also argued that the water pollution was a result of local sewage and that the deadlines of the Directive on Urban Waste Water should therefore be those complied with (these deadlines would give Spain a considerable amount of extra time). Finally, it was claimed that the occurrence of an extraordinary drought was responsible for the limits under Art. 5 (2) having been exceeded. However, the Court ruled that Spain was unable to prove the cause. Spain also pointed out that the directive was to be integrated into the new Water Framework Directive and that therefore the old deadlines were no longer applicable. The European Court rejected this argument and argued that all the deadlines in the directives that were to be integrated in future into the Framework Directive remained valid.

In the case of the Drinking Water Directive 80/778/EEC there were problems regarding, above all, with the interpretation of directive regulations, particularly the deadlines in Art. 19 and the definition of "emergency" in Art. 9. In Case C-42/89 against Belgium, financial difficulties also played a part. The limits were also not complied with by several Member States. In Case C-340/96 the Court criticised the fact that non-binding agreements between state authorities and the water authorities did not represent implementation conforming to the directive, since these agreements ("undertakings") permit exceptions and variations from its provisions. The United Kingdom argued, in addition - as Spain had previously done in Case C-92/96 -- that the implementation of the directive was unnecessary, since it was to be integrated into the new Water Framework Directive. The proceedings on the Urban Waste Water Directive are still continuing. Experiences so far (in Cases C-302/95, C-297/95 and C-161/95) lead to the

conclusion that the implementation of the directive, above all at sub-national level, constitutes a serious problem.

Directive 78/659/EEC was in most cases transformed too late into national law, and the necessary special programmes for improvement of the water quality were not set up. The same problems were found with regard to the implementation of the Mussel Waters Directive 79/923/EEC.

In the case of Directive 75/440/EEC the causes of the implementation deficits are also various, and result from institutional reforms, implementation by means of administrative regulations, financial and technical problems, etc.

The proceedings against the implementation of the Nitrate Directive 91/676/EEC -- like those regarding Directive 91/271/EEC -- are still ongoing. Initial information leads to the conclusion that the necessary programmes are not being set up and the limits for nitrates are not being met. In the case of the Nitrate Directive, the integration of environmental requirements into agricultural practice has also not yet been achieved.

Proceeding for treaty breaches have been started against 13 Member States in the case of the Nitrate Directive 91/676/EEC. So far (up to the beginning of 1999) judgements against two states have been given. Similar problems to those regarding the Nitrate Directive have been encountered in the case of the Urban Waste Water Directive 91/271/EEC. Further judgements concerning these two directives are expected shortly.

In a study on the implementation of the Nitrate Directive, Urban Waste Water Directive and Sewage Sludge Directive, the European Court of Auditors found that, in particular, the implementation reports on the Directives in question were not being submitted by some Member States. The Court of Auditors found large deficits in enforcement of the Urban Waste Water Directive, particularly in the southern Member States, while the deficits in the Nitrate Directive (especially by pollution of waters owing to nitrates) were discussed predominantly as problems in Belgium, Denmark, parts of Germany, France, the United Kingdom and the Netherlands. Problems in the application of the Sewage Sludge Directive were diagnosed particularly in France, parts of Germany, Ireland and Italy.

IX. German federal and regional ministers of environment against new Czech dams[11]

In Germany, the regional Minister of Environment from Saxony as well as the Federal Minister of Environment have strongly criticized the Czech dam project on the Elbe river just next to the German border. These dams meant to improve shipping would be built close to two national parks. In a nine pages documents, the Federal Minister of Environment (Mr. J. Trittin, Green party) criticized the impact assessment that was presented by the Czech Republic. In this text, he declares that the present state of the Elbe has not been taken into account and that the assessment does not specify if there will be a transboundary impact.[12] Mr. Trittin also declared that a meeting of international experts should be organized. The Minister of Environment of Saxony (Mr. Flath, CDU, conservative party) also criticized the project, arguing that it was not economically viable.

[11] *European Water Management News*, Wednesday 17 October 2001.

[12] The two countries are signatories of the ESPOO convention regulating projects having (or that can have) an impact on several countries. Source Rivernet.

X. The Commission on Environment of the European parliament approves the amendment against the Spanish national hydrological plan[13]

The Commission on Environment of the European Parliament has approved today the amendment presented by Laura González Álvarez, María Sornosa Martínez and Alexander de Roo against the Spanish National Hydroelectric Plan in the context of the report "Rating policy for development of a sustainable water management". "We are very satisfied with the approval of this amendment " -Alexander de Roo declares. " It is a very important signal that the Parliament wants to transmit today to Spanish authorities and the European Commission. This Plan does not take into account the necessity to develop a rating policy of water according to sustainability criteria. If in addition we consider that this plan is developed in a context of a policy of privatization of water on the part of the Spanish government, we can doubt that sustainability of the water resource has been taken into account ".

The text of the approved amendment reads as follows: "Is deeply worried about the precedent set by proposals for the development of unsustainable water management schemes across Europe, such as the Spanish National Hydrological Plan (NHP), adopted by the Spanish Senate on 20 June 2001 and which includes proposals to build up to 118 new dams and widespread irrigation infrastructure, as they do not address the issue of sustainable water use through pricing mechanisms and other water conservation measures".

XI. Bulk fresh-water exports offer few gains, study says[14]

The idea that Newfoundland could make a fortune by exporting fresh water in bulk appears to be headed down the drain.

Premier Roger Grimes, in a surprisingly frank admission to a small-town crowd, said an internal study prepared for his government shows the province would gain few benefits from bulk exports. "The surprise in it for me is the economic study. That suggests that there is no great economic value, even though it's an incredibly valuable commodity." Mr. Grimes told radio station VOCM after meeting with local officials in Marystown, Newfoundland. "It may not have anywhere near the economic potential value for either the government or a potential investor in a bottling plant, even with bulk exports, as many of us were led to believe."

The study, prepared by researchers at Memorial University in St. John's, is expected to be one of the key documents in a report prepared for the Premier by a cabinet committee. That report should be released within the next two weeks, Mr. Grimes said.

Adele Hurley, a senior fellow with the University of Toronto's water-issues program, said she wasn't surprised by the study's conclusions. "It's consistent with the other finding that I've seen on this issue," she said yesterday. "In spite of its obvious value, [water] is awfully expensive to transport. In their rush to find a profit, they fail to consider the overall costs." The other problem is that many of the potential markets for fresh water are turning to conservation measures to protect their supplies, rather than buying

[13] Source: Rivernet

[14] Michael MacDonald, Canadian Press; Globe and Mail, Saturday, 13 October 13, 2001 - Page A14; Copyright © 2001 Globe Interactive, division of Bell Globemedia Publishing Inc.

from other sources. “There is a silver lining to much of this,” Ms. Hurley said, noting the growing interest in desalination - the removal of salt from sea water. “The market has been cleaning itself up.”

Mr. Grimes sparked a national uproar seven months ago when he revived the debate over bulk water exports. The issue was thought to be laid to rest in 1999 when then-premier Brian Tobin banned the export of water in containers larger than 30 litres. Mr. Grimes, who served under Mr. Tobin in several portfolios, had supported the ban while Mr. Tobin was in power. But he changed his mind soon after he was chosen to succeed him in February. The following month, he said the debate had been thwarted by fear-mongering and the issue deserved another look. Mr. Grimes said at first he would support bulk exports only if a government study showed it was environmentally sound and economically feasible. But he went further by suggesting it was a waste to let the province's lakes simply empty into the sea. That enraged environmentalists and anti-free-trade activists who warned that allowing such exports would transform Canada's fresh water supply into a so-called tradable good under the North American free trade agreement. Once bulk exports started, there would be little to stop foreign water merchants from exploiting one of the country's most precious resources, they argued.

Paul Muldoon, executive director of the Canadian Environmental Law Association, said if the economics of bulk water exports don't make sense, the environmental implications further undermine the idea. "Environmentalists from across the country have been stating that, ecologically, bulk water export is a bad deal," he said from his office in Toronto. "And if you add the potential trade implications -- losing control of our water resources -- the justification for this kind of action diminishes greatly."

Tom Osborne, Newfoundland's Conservative environment critic, said it was obvious Mr. Grimes got cold feet after other premiers made it clear they thought bulk exports were a bad idea. “The Premier has been trying for weeks to back out of the issue. This is a graceful way for him to do it.”

XII. Water in the Middle East peace process[15]

The Middle East is the most arid of the world's major regions. It is also a region of rapid population growth and - in some countries, at least – of rapid economic growth, too. This means a growing demand for water, in a situation of apparently fixed supply. And most existing water supplies in the region are already fully used - and some worryingly over-used. Moreover, most water resources in the Middle East are shared by the countries of the region, or with countries beyond the region. In this situation, the use of these resources by one country will affect how much is available for other countries.

It may also affect the quality of the water, which can be as important as the quantity: if water is polluted beyond a certain point, it becomes unusable for many purposes, or needs costly treatment (which may make it too expensive for certain uses). This is clearly a situation that calls for international cooperation. But in the Middle East, cooperation often seems just as scarce a commodity as water. Indeed, water has been the subject of a number of disputes in the region over the last 50 years. These disputes have not just been between Israel and its Arab neighbours, but also between Arab states (e.g., Egypt and Sudan, Iraq and Syria, Jordan and Saudi Arabia), and between Arab states and Turkey (over the Tigris and Euphrates) and the states of sub-Saharan Africa (over the Nile). Furthermore, these disputes are entangled

[15] Foreign & Commenwealth Office, London, May 2000, research & analytical papers. This paper can be found in the public domain of the UK foreign office and can be downloaded from their website (http://www.fco.gov.uk).

in other disputes and rivalries, not related to water. It is, therefore, not as easy to resolve these disputes as it would be to settle a water dispute between two Western European countries, or the US and Canada, where the basic relationship is good. There are, however, grounds for optimism. For one thing, all governments in the region are aware of the importance of the issue -- although this awareness is sometimes translated into hostile rhetoric rather than constructive decisions.

What is more, agreements over water do exist between some Middle Eastern countries: for example, between Egypt and Sudan, and Israel and Jordan. As a result of these agreements, cooperation does take place - it may be patchy, geographically speaking, but it does exist. And, while rhetoric on water is sometimes bellicose, the actions of governments in the region suggest they are prepared to find ways of dealing with the scarcity of water that do not involve armed conflict. In this endeavour, they are assisted by the fact that, strange as it may seem, there are ways of substituting for water. The most striking example lies in agriculture: of all economic sectors, irrigated agriculture is the heaviest user of water by far in the Middle East, nowhere taking less than 60% of available water and often taking over 90%. It is, of course, impossible to irrigate crops with anything other than water. But countries can reduce the proportion of their water supply that goes to irrigation, by increasing their reliance on imports of food. Provided that Middle Eastern governments feel secure enough, and can earn the necessary foreign exchange, this is an economic rather than a strategic choice. This option also assumes, of course, that there is food to be bought on the world market which, so far (but naturally at varying prices), has always been the case.

Moreover, there are ways of making better and fuller use of existing water supplies - which comes to the same thing as having additional supplies. Examples are the reduction of losses in water distribution networks, the use of more efficient equipment such as "minimum-flow" fixtures for toilets and showers and - most important of all - the use of treated urban wastewater (sewage) for irrigation. Finally, it is possible to obtain additional water. This can be done by importing from elsewhere, or by desalination. The problem is the cost, especially the cost per cubic metre of the water. But producing new water, whatever method is used, remains cheaper and less risky than going to war.

It is worth examining how much help in resolving water disputes (whether in the Middle East or elsewhere) can be expected from international law. International law does indeed offer some guidance, but only goes so far. The main codification of international law on water is the UN Convention on Law of the Non-navigational Uses of International Watercourses. Two basic principles form the core of the Convention: states using the water of international watercourses should do so in an "equitable and reasonable manner"; at the same time, they should avoid doing "significant harm" to other states with which they share the watercourse.

The UN Convention has a number of limitations. First, it does not cover groundwater that is not associated with a river basin. It would therefore not apply except by analogy -- to some important shared sources of water in the Middle East, for example, the Mountain Aquifer system under Israel and the West Bank, and the Qa Disi aquifer shared by Jordan and Saudi Arabia. Second, the Convention is not universally accepted. A number of states (including Israel) believe that the Convention does not offer enough protection to existing users of shared water resources. Third, the Convention offers only general principles, which are open to interpretation. States that share international watercourses will not find in the Convention a mathematical formula enabling them to work out an equitable division of the available water: they themselves have to agree on such a division, through negotiations.

There are two main types of water resource available to Israel and its Arab neighbours: groundwater, contained in aquifers (natural underground reservoirs in porous rocks), and surface waters, in rivers and streams. As far as groundwater is concerned, Israel draws on two major aquifers. These are the Mountain Aquifer (underlying the West Bank and extending beneath the 1949 Armistice Line - the "Green Line" - into pre-1967 Israel), and the Coastal Aquifer, underlying the coastal plain of Israel and the Gaza Strip. Israel shares these groundwater resources with the Palestinians. But only the Mountain Aquifer is a bilateral issue for Israel and the Palestinians. The Coastal Aquifer is not, since (with the exception of the settlers in Gaza), Israelis do not make any use of the aquifer beneath the Strip. Moreover, because of the physical characteristics of the aquifer, the Israeli portion is not affected by the pollution of the portion underlying the Strip. The Mountain Aquifer is recharged each year by winter rain and snow. Most of this precipitation - at least 80% - falls on the hills of the West Bank. The surface water resources shared by Israel and its neighbours consist essentially of the basin of the River Jordan, including its tributaries. However, while there are major rivers in the Middle East (for example, the Nile, the Tigris and the Euphrates), the River Jordan is not one of them. The surface water resources available to Israel, Jordan and the Palestinians, and to those Syrians and Lebanese who live in the basin of the River Jordan, are much more limited.

If a comprehensive peace is to be achieved, Israel will have to reach agreement over water with Jordan, Lebanon, Syria and the Palestinians. In the case of Israel and Jordan, the peace treaty between the two states, signed in 1994, resolved their differences over water. The only negotiating which they still have to do concerns the implementation of the provisions of the treaty. In passing, however, it is worth remarking that Israel and Jordan may one day have to engage in multilateral negotiations with the other riparians who share the basin of the River Jordan because, without an agreement that includes all the riparians, the river basin cannot be managed in the optimal way.

On the Syrian track of the Peace Process, water has emerged as one of the key issues. Negotiations have not, at the time of writing, made sufficient progress to enable outside observers to predict the nature of an eventual agreement between Israel and Syria on water. There is, however, no reason to believe that agreement cannot be reached. This is true also of the Lebanese track where, so far, water does not appear to have been discussed.

For their part, the Palestinians have made a good deal of progress in their negotiations with Israel over water. Some of that progress is embodied in the Interim Agreement of 1995 ("Oslo II"). In respect of water, the Interim Agreement did a number of things.

1. It secured Israeli recognition of "Palestinian water rights" in the West Bank. (It did not, however, say what those rights constituted, leaving that to final-status negotiations.)

2. It recognized the need for additional water.

3. It established the principle of cooperation in matters relating to water and waste-water - and set up a Joint Water Committee to coordinate Israeli and Palestinian activities in these sectors.

These are important principles, and could point the way to the shape of a final-status settlement on water. On the basis of these principles, such a settlement might well result in each side's recognizing that the other has a right to a certain percentage of the water available in the Mountain Aquifer. (A percentage

would be preferable to a volume in cubic metres, because the volume available varies from year to year, with the volume of winter precipitation.) But the two parties would not simply take their shares and go separately about the business of using them: rather, there would be close cooperation in all water-related activities. There would also be cooperation in developing new sources of water. It is possible to be optimistic about the prospects for achieving agreement. Indeed, water is the least difficult of the final-status issues. In part, this is due to the existence of a great deal of common understanding between water experts on both sides. All are agreed, for example, on the need for cooperation in managing existing water resources, in preventing pollution and in finding new sources of water (although there may well be differences about how these things should be achieved).

It will be harder for Israel and the Palestinians to reach agreement on the Palestinian claim for a share of the surface waters of the River Jordan.This is partly because the basin is shared with other riparians (Jordan, Syria and Lebanon). It is also due to the inability of the parties to reach agreement, so far, on the extent of an eventual Palestinian state and whether, therefore, it would be a riparian on the River Jordan or not. Looking further into the future, Israeli and Palestinian water experts are agreed that the existing resources will not be enough for the growing population living between the River Jordan and the Mediterranean. This holds true however those resources are divided. Of course, it is easier to agree on the need for more water than it is to produce it.

To some extent, the gap between supply and demand can be bridged by using water more carefully, or more than once. Waste-water, when treated, is a valuable commodity. A fifth of Israeli agriculture now depends on it, and this proportion is increasing. It will continue to do so, eventually reaching the point at which very little irrigation in Israel will use fresh water. In principle, there is no reason why the Palestinians should not do the same. Indeed, they will have to develop their capacity to treat waste-water, if only to protect their own reserves of groundwater. In practice, this will be a major challenge for the Palestinian Water Authority, as it will require (among other things) capital investment on a large scale and extensive training of technicians and farmers. Better conservation and more widespread re-use will be essential components of a solution to Israeli and Palestinian water problems. But they will not, of themselves, be enough. "New" water will have to be introduced from somewhere. It could be imported, whether by pipeline or by sea. But such importation is expensive in terms of the cost per cubic metre of water, and raises questions about the reliability of supply (including the possibility of interruption for political reasons).

Importation apart, the other main option is the desalination of seawater or of groundwater that is otherwise too saline to be usable. This is also expensive, especially for countries without oil or gas of their own (although even for these countries, desalination powered by solar energy may one day become a possibility). For consumers in poorer countries (including most Palestinians, Jordanians and Syrians), the price of desalinated water would be well beyond their reach. In such cases, desalination is not really a practical option until economic development has brought much higher levels of overall prosperity. This is a serious drawback. In other respects, however, desalination has great advantages. First, there is no shortage of seawater. Second, a coastal state's water supply is not at the mercy of other countries (apart, of course, from military action or sabotage). Third, although desalination plants are undoubtedly costly to build and to run, they are still cheaper than buying modern weapons systems. This may seem at first sight to be a facile equation. But even a very short-term and cynical approach ought to compare the costs and benefits of military action, or the threat thereof, with the costs of acquiring additional water by peaceful means.

There is no reason to think that Israel and all its Arab neighbours cannot reach agreements over water. Indeed, Israel and Jordan have done so, and Israel and the Palestinians have taken serious steps towards this goal. If water were the only issue in dispute on the various tracks of the peace process, it would be a great deal easier to resolve. The fact that more water can be produced may help to take some of the heat out of the negotiations over existing water resources. Unfortunately, however, there are other, far more difficult issues involved, such as borders, security arrangements, Israeli settlements, refugees and Jerusalem. So resolving these water disputes will take longer and may well be more acrimonious than it would be, were it possible to deal with them in isolation. But it is unlikely that water will prove to be an obstacle to the conclusion of peace agreements on the Lebanese, Syrian and Palestinian tracks. Cooperation over water - to ensure optimal use and adequate supplies –will be crucial to economic and social development throughout the region. Once peace agreements have been concluded, Middle Eastern governments will need to face up to this challenge.

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