BC (BRITISH COLUMBIA) TAP WATER ALLIANCE

A Strong Public Advocate for Legislated Protection of BC's Drinking Water Sources (Since 1997) (Website: www.bctwa.org)



NATURAL SOURCE PROTECTION: HIGH TIME FOR A CHANGE



Photo: Big Eddy Water Works District Chairman, Lloyd Good, standing beside No Trespassing sign at the 500-hectare Dolan Creek Category One *Land Act* Watershed Reserve, near Revelstoke, BC, August 2003. Transmission line clearing and some logging through Dolan Creek degraded the small watershed.

THE MISSING ELEMENT IN CANADIAN, PROVINCIAL, AND TERRITORIAL REGULATIONS, POLICIES AND LEGISLATIONS ON PUBLIC DRINKING WATER

Ever since federal United States and Canadian regulations governing public drinking water became more refined and stringent in the 1960s as a result of widespread increasing public health concerns, attention has become ever more focussed on technological treatments rather than addressing the actual cause and effect issues of water supply. Treatment, as a solution, has been substituted for source protection. The "fixation" can largely be

attributed to international politics intent on compromising the public's greatest assets through industrial policies of "multiple use", "integrated resource management", "best management practices", etc. These resource

> NO TRESPASSING

CITY OF REVELSTOKE

WATER RESERVOIR

management philosophies began to be seriously introduced in the U.S. in the 1940s, and then radiated outward, principally through forest industry associations, with the endorsement of the American Water Works Association and its affiliates. There is little question, even as witnessed today, that "protecting" the public's drinking water sources is being condoned in the name of technology, in order to accommodate a highly suspect rationale for permitting the physical degradation of these sources. We can no longer afford to blindly pretend that these technologies will provide adequate "protection" for humanity's drinking water sources. By providing cause and effects in water supply watersheds and endorsing much needed change to federal, provincial and territorial policies that intend to protect water sources from commercial/industrial, agricultural, and recreational ventures, we will not only be doing "the right thing", but we will be returning to policy and legislations that was abandoned at our peril.

A NEW STRONG CHARTER ON WATER

There is a great need to develop and implement an inter-provincial federal Charter on fresh water that incorporates and comprehensively addresses numerous and valid concerns about the protection and conservation of fresh water sources. The *Canada Water Act* (that originated in 1970) did not foresee conflicts, for instance, from controversial privatization initiatives lobbied for by private industry in the 1990s,

controversial privatization initiatives lobbied for by private industry in the 1990s, and the related legal issues that arose from international trade agreements that were approved without public scrutiny and input. Scientists and numerous public organizations have developed a wealth of information about these concerns over the last decade or so. This information should be incorporated into the new legislations.

LEGACY OF PROTECTION POLICIES AND LEGISLATION



Photo of an old faded (metal) notice still posted at the Arrow Creek Watershed Reserve intake, the water supply for Erickson and Creston. It reads: "WARNING. Camping or fishing on the bank of this stream is STRICTLY PROHIBITED. The pollution or befouling of any lake or stream, the water of which is used for domestic purposes, is a criminal offence, punishable by a fine of \$400 and six months imprisonment. See sections 43 and 71, Sanitary Regulations, July 1917. Provincial Board of Health, H.E. Young, Secretary."

Federal legislation in the former Railway Belt in BC (an area of 17,150 square miles, effective 1884 -1930), combined with provincial legislations and policies over remaining Public lands, provided for integrated protections of public drinking watershed sources in BC. For instance: 1906, the Federal Forest Reserves Act (6 Edw. vii, c.14), with Watershed Reserves, i.e., the Coquitlam Watershed Reserve (Federal OIC, PC 394, March 4, 1910) and East Canoe Creek (Federal OIC in the BC Gazette, 1917); 1908, the Land Act (Provincial Statutes, 1908, Chapter 30, section 47, Leases, subsection 8); 1912, the Forest Act (BC Statutes, 1912, Chapter 17, Section 12.2). Dozens of Watershed Reserves, also known as Protection Reserves and Gazetted Reserves, were created as a result. The provincial Sloan Forest Resources Commission (1944-1945) identified the Reserves when public concerns were voiced to the Commission about logging threats to them. The Commission advocated their continued protection. The 1957 Forest Service document, Continuous Forest Inventory of BC, identified the status of the Reserves alongside protected Parks, and stated that they were not to be included in the timber harvesting landbase that was then under consideration for sustained yield forestry by numerous Public Working Circles. Subsequent revisions to the document were made until 1973, but the same provisos were retained.

As stated in the BC Tap Water Alliance May 2002 report, *Doctoring Our Water*: From a Policy of Protection to a Policy of Submission, the BC Department of Health's Medical Health Officers were previously in charge as guardians of provincial domestic watersheds, and early annual reports stated that the condition of these protected watersheds did not necessitate treatment: "Every one acknowledges that the power of the Empire is in "the silent navy," but few people are aware that locally our future is in the sustained purity of the water-supplies, silently though zealously guarded by our Health Officers" (1924 Annual Report); "Watershed areas supplying water to our cities are now declared health areas under special rigid sanitary regulations, enforced by this Department with gratifying results. The cities thus protected have no water-borne disease traceable to their water-supply" (1930-31 Annual Report). Greater Vancouver Water District Commissioner Cleveland proudly stated in 1940: "People here won't drink chlorinated water." Opposition to chlorine treatment was fierce in the early 1940s by Greater Victoria residents who formed the Anti-Chlorination League. In many cases chlorine was first administered as a primary treatment after logging began in formerly protected sources. The public was opposed to both.

WATERSHEDS "INVADED"

The American Water Works Association's Journal helped promote the invasion of U.S. protected watersheds in July 1946: "Many American cities have land which they are holding for watershed protection or some other protective use... Here is a potential source of timber which should be developed in the national interest" (E.S. Munns, U.S. Forest Service). In BC, the Nelson Region Forest Service Manager, under the command of the Provincial Chief Forester deciding against the legislation and policies that protected drinking watersheds, wrote: "In many areas we will not be able to supply local industry's needs unless we can invade the watersheds" (J.R. Johnston, July 17, 1964). As these sources were degraded, governments ignored and overruled citizen and agency health



officials' protests. As laws and policies were relaxed, amended, or simply ignored, federal/provincial/state health authorities made water standards stricter and gave orders for communities, towns and cities to implement and pay for water treatment. When Health Officials in BC passed a resolution in September 1975 requesting veto powers over activities in water sources, the government stopped referring development plans to the Health Officers.

GOVERNMENT REPORTS "SOFT" ON WATER DEGRADATIONS

Shamefully, it was not until about 40 years after this invasion took place that the first official audit of BC's collective drinking water sources, the March 1999 Auditor General's report, *Protecting Drinking Water Sources*, was undertaken. Though narrow in scope, leaving hundreds of water sources out of the picture, it identified that about 100 larger community watersheds were in need of \$1 billion in treatment facilities due to the cumulative effects of unrestrained and unaccounted for resource development. In spite of



the costs being imposed on water consumers, the government's April 2000 follow-up report by the Select Standing Committee on Public Accounts failed to recommend the federal and provincial governments initiate resource protection measures. In April 2001, when the BC government introduced the *Drinking Water Protection Act*, source protection was ignored - the emphasis had become imposing treatment measures. From 2002-2003, the BC government relaxed Crown land regulations to allow for further compromises in drinking water source protections. (In July 1992, with passage of the *Safe Drinking Water Regulation*, the public criticized the government for ignoring source protection while imposing chlorination treatment.) Following on the heels of the Drinking

Water Protection Act, Provincial Health Officer Perry Kendall released the delayed Annual 2000 Report, *Drinking Water Quality in BC: The Public Health Perspective*, in October 2001. A far cry from the former

Cattle roaming freely and defecating in Okanagan drinking supply in Town of Penticton's Ellis Creek water reservoir. Weyerhaeuser road networks and clearcuts in background.

legacy of the Health Ministry, the report accepts not only continued commercial logging, but also cattle grazing and mining in public water supplies. And, what's even more interesting, the report stresses that a completely protected water source (there being only a few left) is no longer safe because of "wildlife". Health Minister Colin Hansen stated in the Legislature (Oct.10/2002), that water contamination "over the last 20 years" was caused by wildlife feces not human activities as health officials and the public have believed in the past. Luckily, cattle feces seemed to be o.k. According to the BC Forest Practices Board, the government has sanctioned cattle grazing in over 250 community watersheds in the Province.

NATIONAL RESEARCH AIMS

In October 1999, the NSERC (National Sciences and Engineering Research Council) launched a new "industrial research chair, which is a unique partnership of academia, government and industry in BC, Alberta and Nova Scotia" (UVic Creates research chair on drinking water ecology, Univ. of Victoria Ring newspaper, Nov.12/99). About \$5 million was first allotted to the program chaired by Azit Mazumder. Funding partners include forest industry companies, the BC Cattleman's Association, and provincial ministries that promote resource use in drinking watersheds. Though Dr. Mazumder initially stated that his research "will address how, not whether there should be logging," he recently stated at a World Water Day forum on March 22, 2004 at the University of Victoria that he himself preferred full protection of these sources, but that it was "impossible" to bring about such a change. Unfortunately, Mazumder's starting point isin ignoring the single greatest determinant of water quality - forest age. Full resource protection policies have been administered by the Greater Victoria, Greater Vancouver, Portland (Oregon) and Seattle (Washington) watersheds. Mazumder's research program on drinking water should focus on water quality, rather than producing findings that support the public relation schemes and practices that have degraded the public's water sources.

NO SOCIO-ECONOMIC STUDIES

What percentage of BC's land base is home to community and domestic watersheds? According to the first government report in 1980 on Community Watershed Guidelines, the amount, based on the creation of about 300 Land Act Watershed Reserves by a government Task Force in the 1970s, is a very small percentage. The government of the day inadvisably allowed the Ministry of Forests, in a period of "sympathetic administration", to second the public's drinking water assets to supplement the logging land base. This went against long-held provincial policies and against Forest Resource Commissions' recommendations. The Forest Ministry's policies of "multiple use" and "integrated resource management" began to allow "other uses", mining, cattle, recreation, etc. However, there have been no benefit-cost analyses made on the accumulated financial costs to affected communities. For instance, filtration and ozonation treatment costs for the Greater Vancouver Water District alone, following the degradation of its three watersheds from logging, are costing three levels of government (ie taxpayers) over \$650 million, with annual operating costs projected at about \$12 million. The public is left to cover the costs of others (who briefly profited), and was left to suffer chronic health impacts from the resulting industrial grade water.

THE NEED FOR RESOURCE PROTECTION CRITERIA AND STANDARDS IN FEDERAL AND PROVINCIAL DRINKING WATER REGULATIONS

The missing element in recent Federal and Provincial Health and Drinking Water Regulations is resource protection of drinking watershed and groundwater sources. This critical component of a drinking water protection plan has a long history: "It is needless for me to expatiate here upon the now well informed doctrine relating to the protection of municipal water supply" (federal hydrograph engineer E.M. Dann, July 17, 1915). A provincial Community Watersheds Task Force (1972-

1980) process, charged with examining "the practicability" of resource extraction in drinking watersheds came to the same conclusion, but was quickly compromised. The 1984 Federal Inquiry on Water failed to address this issue and to recommend new policy changes by the Federal Government. Federal and Provincial politicians in BC failed to enforce strong regulations over a period of decades, despite enormous public opposition to the degradation of its water sources since the 1960s. A political decision had been made to sacrifice these sources, and then to make taxpayers pay all the costs. Part of the sacrifice included the removal of the Ministry of Health as spokes-ministry or defender of these sources, followed by the shift to the Ministry of Environment and then, ultimately,



to the Ministry of Forests as the lead agency. In the 1980s, the Union of BC Municipalities passed numerous resolutions for the protection of public and private drinking water forestlands, but politicians turned a deaf ear, and the issue was quietly shelved then hung out to dry through Committee processes. The BC Attorney General's Department extensively reviewed liability issues related primarily to logging practices in the 1980s, but decided to make the public pay for government sanctioned incursions, placing the "onus" or burden for providing "potable water" on water purveyors.

STOP TREATING US TO DEATH



Water Action Group 429-7832 or 429 1070

There has been a strong tradition in BC against chlorine as a primary and secondary disinfection treatment. Records show high quality water consistently results from protected areas without any form of treatment. When water purveyors opposed chlorine as a result of health concerns, even as a residual treatment, current provincial health authorities condemned them. Why put a carcinogenic and mutagenic chemical toxic substance in your drinking water, purveyors asked? The price that the Erickson Improvement District (EID) paid for asking to treat the Arrow Creek water supply with Ultra Violet (which Health officials were opposed to), was to have the provincial government to forcefully dissolve the District, remove its democratic form of accountability, and then transfer its assets to the Regional District of Central Kootenay. The government then imposed an overkill Cadillac \$13 million membrane filtration plant to be built by CH2M Hill and paid for by taxpayers. The reason behind the push to chlorinate was the government's plan to allow logging the Arrow Creek Watershed Reserve. The EID had vigilantly rejected logging in the Reserve since 1940. High quality water has been taken from Arrow Creek since 1929. The first chlorine used was not until November 27, 2003, the very month logging began.

THE GLOBAL MOVEMENT

In August 2003, the World Wildlife Fund and the World Bank published a 112-page collaborative report, *Running Pure: The Importance of Forest Protected Areas to Drinking Water*, which received recognition in the world press. Of 105 international City watershed sources studied, of which just under half have some form of forest protection, one case, involving Rio de Janeiro's watershed, showed "that where forests have been protected water quality standards remained high and the water treatment is much reduced." Drinking water source protection has now become recognized globally, despite the semi-scientific rhetoric from resource management agencies, and industries with their compromised notions of "protection".

The BC Tap Water Alliance is a non-profit organization, established in 1997, which relies on public donations for its work. Will Koop, the Alliance's Coordinator, lives in Vancouver, BC, and hopes to publish a book in the near future on the intriguing history of drinking watersheds and the public's ongoing fight to protect them.

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