

LIFE'S ESSENTIAL: DEBUNKING THE MYTHS AND EXPOSING THE REALITIES OF CANADA'S WATER SYSTEM

ABSTRACT

The world is on the verge of a global water crisis. In Canada, there is a widespread misconception of water abundance; a belief that we are exempt from the need to conserve and protect. This paper will demonstrate that there is a lack of water accessibility on Indian reserves in Canada, and further, that the water that services Indigenous communities is not held to the same quality standard as the water throughout the rest of the nation. Taking a holistic approach to well-being, it is argued that the issues around quality and quantity of water on reserves is a threat to the health of local people and represents a modern form of structural violence.

PREFACE

This paper was prepared in 2008 for an undergraduate course in Social Health and Inequality. Because of this, some of the sources may be out of date and more current information and case studies are available¹. Most notably, recent bills, strategies, and action plans have been introduced to see the more equitable and ethical service of water to Indian reserves in Canada². Although these new proposals have been put forward, only time will tell if meaningful action and significant steps will be taken to improve living standards within Canada's Indigenous communities. Regardless of the current initiatives being proposed, I believe that the issues surrounding water accessibility and quality on Indian reserves in Canada has not been afforded the attention that it deserves. Until these issues are recognized, the ideas and

arguments presented in this paper are relevant to Indigenous peoples within Canada and should be to every citizen of this country. As such, it is our responsibility to start making change to see that water—life's essential—is accessible to all.

INTRODUCTION

Canada is facing a water crisis. This crisis is not simply a result of pollution, overuse, and depletion of water resources, but also of bad management, mainly due to the absence of a clear governance framework to oversee the protection, conservation, and good management of Canada's water resources (Bakker 2007:245).

Global water issues are becoming an increasing concern and can no longer be neglected. As an essential resource to all life forms, issues around water quality and quantity are being highlighted as reason for grave concern. The following will consider some of

the most prominent problems of water quality and accessibility in Canada, which will then be contrasted with water accessibility and quality issues on Indian reserves in Canada. Through a consideration of Indigenous history and colonial practices, it will be argued that Indigenous populations remain subject to unjust inequalities and systemic disparities. It is argued that the inequalities established throughout colonization are maintained today through negligent colonial policies. A lack of access to sufficient and potable water has jeopardized Indigenous peoples' health—physical, spiritual, cultural, mental, and social—and is a modern example of structural violence in Canada.

IDENTIFYING STRUCTURAL VIOLENCE

Structural violence is a term used in reference to the effects of systematic and institutional violence. As Kohler and Alcock (1976:343-344) describe, structural violence includes all harm caused by unjust social, economic, and political, systems, institutions, or structures. Importantly, these harms can come in the form of social, physical, or psychological distress. Structural violence, like that of armed violence, has the potential to maim and kill its victims, and cause harm as part of an institution or through public policy. Global examples of structural violence include lack of access to adequate food, water, or health care, all of which jeopardize the quality of life of local people. Socio-economic status is often correlated with the experience and sev-

erity of harm caused by such forms of structural violence.

OVERVIEW OF WATER ISSUES IN CANADA

Drinking water is taken for granted by the general public (McQuigge 2002). Water issues today are a result of ignorant mismanagement and economic motivations, which at an international level, have had implications on health and social well-being (Gleick 1998:571). In Canada specifically, there is a myth of water abundance; a myth that Bakker (2007) adamantly argues has resulted in environmental degradation and unnecessary waste. This issue is amplified by Bakker's assertion that regional and national politicians maintain a belief that Canada holds an adequate supply of this essential resource. Bakker continues that Canada's false belief in water availability is leading to the collective perception that Canadians are exempt from water conservation efforts. In actuality, the World Resource Institute estimates that Canada holds only 6.5% of the world's renewable water resources (Bakker 2007:25). Moreover, much of Canadian water is in isolated northern areas, and thus, is not easily accessible to the large urban areas that place the highest demand on these sources. Bakker (2007:27) argues that the misconception of water abundance must be corrected, and if it is not, will cause increased political, economic, and ecological damage. Clearly there are reasons for concern regarding the management and policies controlling this resource in Canada, which is amplified when

considering federal and provincial jurisdiction.

WATER AS A HUMAN RIGHT?

There is both a national and international debate concerning the declaration of water as a human right under the Charter of Rights and Freedom (Bakker 2007:363). The central argument in favour of recognizing water as a human right is simply that water is essential to human survival. Proponents of international policy recognizing water as a human right argue that sufficient access to potable water would increase health and well-being and encourage international responsibility (Scanlon et al. 2004:1). Given the current state of water, and considering the social and health implications that this resource has, it seems difficult to argue against the notion of water as a human right. However, Bakker (2007:9) argues that doing so would help lead the way for water exportation—a precursor to the privatization and commodification of water—which all Canadians should be cognizant. Gleick (1998:572) states, water is increasingly commodified and has already been privatized at an alarming rate. Although exportation and privatization are vital concerns in the current and future state of water, these issues are outside the realm of this paper.

WATER LEGISLATION AND JURISDICTION IN CANADA

National and provincial legislation present a complex set of issues related to water as a resource. In Canada, legislation is a shambled patchwork

system in which accountability and responsibility are constantly passed from the federal to the provincial government resulting in significant gaps in policies (Bakker 2007:365). Layers of multilateral management create further complexities that jeopardize ecosystems and water quality. Furthermore, quality standards and monitoring vary significantly between national and provincial regulations.

To date, policies have neglected ecological sustainability, as well as community, cultural, and long-term demands on water supplies (Gleick 1998:571). Gleick (2007:257) suggests that policies and planning must evaluate and incorporate equity and sustainability in order to maintain healthy management of water resources. In recognizing these issues, among many others, Bakker (2007:257) suggests that the collective goal in Canada should be to develop a comprehensive strategy of governance and an elimination of the division between federal and provincial governments. Bakker (2007:257) further argues that there must be a national set of principles to ensure sustainability and equity of this resource. These waters are further muddied when we consider resource service and quality serviced to Indigenous communities in Canada.

WATER LEGISLATION AND JURISDICTION ON INDIAN RESERVES

Water serviced to Indian reserves in Canada poses threats to the health and safety of community members.

According to the Assembly of First Nations, a reported 20% of Indigenous communities are serviced with contaminated water, which poses significant health threats to residents (Bakker 2007:305). As stated earlier, the disparity between federal and municipal water management is amplified on Indian reserves, which jeopardizes the quality of life and health of Indigenous peoples. An entirely different set of disorganized and simplistic legislation is applied to Indigenous communities where jurisdiction and regulations fall into the hands of the federal government, Indian and Northern Affairs Canada (INAC), and Health Canada (Office of the Auditor General of Canada 2005:10). Currently, ongoing water monitoring and water treatment are inadequate on reserves. As the *Report of the Commissioner of the Environment and Sustainable Development: Drinking Water in First Nations Communities* (2005:2-3) identifies, there are no laws that govern water management or systems within these “extremely poor” and “unstable communities.” The current policy, which is blatantly exclusionary and detrimental, was put in place to regulate drinking water in the 1960s and 1970s. Since then, policies and practices demonstrate an insufficient and ill-communicating relationship between federal and provincial governments, INAC, Health Canada, and Indigenous communities.

Accountability has become a significant question in terms of water quality on reservations due to conflicts between federal and provincial jurisdiction. INAC is the department that

governs the construction and maintenance costs for water systems on reserves (Office of the Auditor General of Canada 2005:1-3), while Health Canada is responsible for conducting water testing and monitoring. When considering this, it must be noted that there are no regulations stating that drinking water on Indian reserves *has to be tested*, unlike national regulations that maintain regular drinking water monitoring (Office of the Auditor General of Canada 2005:11). Within this complex and over-crowded list of governing bodies, much of the onus remains to be placed on the Indigenous community.

Individual reserves, through outside funding arrangements, are responsible for the upgrade and maintenance of their own water systems (Office of the Auditor General of Canada 2005:1). A stipulation of current funding arrangements is the expectation that Indigenous communities construct, operate, and maintain their facilities in accordance with Health Canada’s requirements. An essential point that has been neglected through this system of management is that many Indigenous Nations remain in a poor economic state, restricting many communities from initiating, operating, and maintaining their own water systems (Office of the Auditor General of Canada 2005:6). Therefore, the policies and regulations put in place by the government expect that they will be implemented and maintained on reserves, which is not feasible due to the depressed economic state of many of these communities. Hence, it is necessary here to include a relevant summary of the

reserve system to demonstrate how Indigenous peoples remain to be implicated by colonialism in Canada today.

COLONIAL HISTORY AND THE ESTABLISHMENT OF INDIAN RESERVES

Indian reserves were allotted during colonial settlement as a way of segregating Indigenous peoples in Canada. Today, Indian reserves remain under federal jurisdiction, and here it is important to note again, water access and rights are primarily maintained at the provincial level. Reserve lands were initially established for the use and “benefit” of Canada’s First Peoples (Bakker 2007:305), essentially creating an enclave of Indigenous peoples in an attempt to “civilize” the “savages” of modern day Canada (Hundley 1978:454). Canada’s colonial history extends beyond this systematic segregation to the banning of the traditional potlatch, and attempted genocide (Jenness 1954:100). Residential schools forcibly removed children from their home environment and families, resulting in the loss of many traditions, kinship systems, and language, all of which are essential pieces to the wholeness of a culture (Jenness 1954:99).

Today, Indigenous reserves have comparatively low-income communities with high unemployment, low education, and high rates of physical abuse and substance abuse (Department of Indian Affairs and Northern Development 1997; Hundley 1978; McHardy and O’Sullivan 2004).

The early establishment of reserves systematically oppressed and assimilated Indigenous peoples, leading to political and social inequality, resulting in economic and social depression and an overall poor quality of life (Jenness 1954; McHardy and O’Sullivan 2004). Ultimately, the colonial period has had ongoing and cumulative impacts on Indigenous populations, displacing and marginalizing whole communities in what Jenness (1954:97) termed a “segregation camp psychology” that has become perpetuated intergenerationally. Additionally, throughout the colonial period, and still today, Indigenous peoples in Canada (and throughout the world) must withstand imposing Western ideologies, values, and laws. Past and present systematic displacement has involved the exploitation of traditional lands and ultimately forced Indigenous peoples into a battle for their culture and livelihood (Bakker 2007:304). Unfortunately, Indigenous peoples are forced to continue to fight these forms of systematic discrimination and strive for equal access to resources, livelihood, and quality of life. These issues will now be considered in relation to water quality and accessibility on Indian reserves in Canada.

WATER QUALITY AND ACCESSIBILITY IN INDIGENOUS COMMUNITIES

Put very simply, the inadequacy of water legislation within the nation is amplified on Indian reserves in Canada. Indigenous communities continue to be without sufficient drinking

water, due to intermittent and inconsistent policies between the federal and provincial governments (Bakker 2007:252). According to the Office of the Auditor General of Canada (2005:17), one unidentified Indian reserve community with a population over one thousand was on a boil water advisory for nearly four years. Similarly, another unnamed reserve community was reportedly on a boil water advisory for over three years before actions were taken to correct the system deficiency. Indigenous peoples view this obstacle as a fight for life—quite literally—as water is necessary for their livelihood and is the essence of traditions (Hundley 1978:454). Hundley (1978:456) further argues that the current state of Indigenous status and quality of life will continue until Indigenous peoples are allowed sufficient water supplies. This would, in addition to improving health and assuring that basic needs are met, contribute to the preservation and resurgence of Indigenous traditional and cultural identity.

HEALTH IMPACTS

Several different forms of contaminants can influence the quality of water and originate from many sources. The most critical to health are pathogens and coliform that can cause gastrointestinal disease, skin disorder, or cysts (Payment *et al.* 2005). Pathogens and other contaminants are frequently found on Canada's reserve water systems. According to First Nations and Northern Statistics Section (2004:9), there are six hundred Indian reserves in Canada, ninety-

five of which were on boil water advisories as of March 28th, 2008³.

One of the most publicized events occurred in 2005 when approximately one thousand residents of Kasechewan, a remote reserve in Ontario, were evacuated due to risks in water quality (Eggertson 2006:1248). Eggertson reports that the community had been on a boil water advisory since 1996 due to high levels of *Escherichia coli* (*E. coli*). The health of residents in the community became impaired due to high levels of chlorine, which was used to combat the *E. coli* contamination. Increased quantities of chlorine can result in negative health effects, such as, gastrointestinal disease, scabies, and hepatitis, among others (Eggertson 2006:1248). These health concerns posed a very serious threat for many residents and demonstrate the inadequate quality of water in Indigenous communities.

In 1995 a report identified that nearly one quarter of reserves in Canada were serviced with drinking water that posed a threat to the health and safety of its consumers (Office of the Auditor General of Canada 2005:8). As a result of this report, INAC took several measures to improve the state of water on Indian reserves. These measures included finances to improve, upgrade, and repair current water systems; new administrative guidelines on the operation and maintenance of water systems; and funding to train local system operators. A follow-up study in 2001 was conducted to evaluate these efforts and found that despite greater fund-

ing for water systems, there remained to be a great number of issues surrounding water quality and accessibility on Indian reserves.

In 2003, the First Nations Water Management Strategy was established through collaboration with the federal government, INAC, and Health Canada, to ensure potable drinking water was accessible to all residents of the country (Office of the Auditor General of Canada 2005:8). This initiative was considered to be a priority and several additional measures were taken to initiate the project, including: the development of comprehensive policies, guidelines, and standards, educating residents of reserves on water quality issues, and increased efforts towards issues of accountability.

“CHALLENGES” TO PROVIDING SAFE AND ACCESSIBLE WATER

Ensuring safe and accessible water is dependent on several factors, such as funding, regulations, technical issues, developmental challenges, and population size (Office of the Auditor General of Canada 2005:1-5). These, among many others, were identified as obstacles to providing safe water to any community, and are amplified on Indian reserves due to the relationship between the federal government and Indigenous peoples. Many Indigenous communities are located in isolated areas with difficult terrain that presents technical and economic challenges in providing water services. Some reserves are only accessible at certain times of the year, or may have limited electricity. Furthermore

water resources are often located off reserve, presenting another challenge of accessibility and protection. Due to the small size of many Indigenous communities, there are often few qualified operators available in the area. Though these may be true obstacles in the way of providing an adequate water supply to every person in every region, this should not be accepted as a sufficient reason for the neglect of Indigenous communities.

AUDITOR GENERAL REPORT

The Report of the Commissioner of the Environment and Sustainable Development: Drinking Water in First Nations Communities (2005:7-16) sought to determine whether Indian reserves received equal levels of water service and quality with controlled counterpart communities or off-reserve communities. The study compared 20 Indigenous communities across three regions in Canada and provided several conclusions on the current state of water on Indian reserves. First, some communities remained to have an overall lack of access to basic running water. Second, management and maintenance funds allotted to Indigenous communities are dependent on progress reports demonstrating their compliance to codes and standards; a flawed system because there is no concrete and comprehensive list of codes and standards available. Findings also determined that some 75% of Indian reserve waters were classified as potentially hazardous. As well, it was identified that within Indigenous communities, there is insufficient

water testing, and the testing that is done is not comparable to the Guidelines for Canadian Drinking Water Quality.

As outlined above, monitoring of Indigenous communities' drinking water falls under Health Canada's jurisdiction and is not held to a standard comparable to the rest of Canada. In addition to sporadic testing, the only measures taken when risks are found are public advisories; Health Canada merely has to inform the community that there are safety issues and often the problems are not considered an issue of priority (Office of the Auditor General of Canada 2005:17). Ultimately, there tends to be an overall and complete neglect for regulatory regimes throughout Canada, particularly when considering water serviced to reserves today. In response to the Auditor General's Report, it was recommended that INAC and Health Canada develop current provincial regulations to help ensure that Indigenous peoples are provided equal access to safe drinking water. By adopting the regulations already in place in the rest of Canada, the rights and health of those living on reserves would, in theory, be protected (Office of the Auditor General of Canada 2005:12). As supported throughout this overview, Indian reserves in Canada do not benefit from a level of protection comparable to that of people living off reserve and this exemplifies a modern form of structural violence.

CONCLUSIONS

Some fifty-five years ago, Jenness

(1954) travelled throughout Canada and identified many concerns with the quality of life on Indian reserves and stated that conditions were unacceptable. At this time, he posed a series of questions and highlighted issues around measures taken to eliminate Indian reserves and end the apartheid system, and the federal government's role in ameliorating malnutrition and improving overall health (Jenness 1954:100).

Today, I would like to pose the question again—*why do Canada's Indigenous peoples remain to be structurally segregated and at a lower standard than the rest of the nation?* As this overview has presented, there are a series of complex layers relevant to water issues, particularly on Indian reserves in Canada. The result is a terribly dismal picture that illustrates the unfortunate and unnecessary suffering imposed on the Indigenous peoples of Canada. Understanding historical roots of colonialism—oppression, assimilation, segregation, and discrimination, which remain to be unbearable truths for many of Canada's First Peoples—is important when adopting a holistic approach to the current conditions of reserves. This history combined with contemporary colonial policies keep many Indigenous peoples systematically disadvantaged and exploited, as seen in the case of water rights and accessibility and exemplifies a modern and regional form of structural violence.

No genuine efforts or sincere improvements have been made on behalf of the government, especially

given that the historical structures that first oppressed Indigenous peoples have not been adequately resolved, a result which has only been compounded by the repeated and varied acts of intergenerational discrimination. That is, historically, Indigenous peoples have been subjected to multiple forms of abuse, which severed connections to cultural values, ecological connections, and kin. In turn, the lack of values, motivations, and esteem forced upon one generation, was unwittingly passed on to the next generation, which has more easily allowed current generations to be dominated by and through systemic colonialism. The current and dismal economic state, correlated with widespread social problems, leaves Indigenous peoples largely depressed, with a suppressed sense of culture. In establishing power and authority over Indigenous peoples, the government continues to maintain inequalities through a vicious pattern originating from the colonial period.

The modern inequalities found within Indigenous communities, inequalities that remain to be diligently neglected, are an appalling disgrace to all Canadians. The Canadian population and government, whom still hold outdated and discriminatory views of Indigenous peoples, largely neglect this embedded and dark history of colonization. Moreover, many of the current struggles that Indigenous peoples face—environmental, political, economic, or social—are ignored at a national level. It is unsettling to realize that a privileged society such as Canada is not able to afford all of

its citizens' fundamental equality of rights. The most disturbing fact is that these are Canada's *First Peoples*, and the Canadian system continues to maintain asymmetrical power relations, keeping Indigenous people marginalized and underprivileged on their own homelands.

Water accessibility and quality concretely exemplifies the embedded colonial relationship between the history of Canada's Indigenous peoples and the power structures that continue to marginalize them, which ultimately jeopardize their health and physical, mental, spiritual, and social well-being. As highlighted throughout this paper, Indigenous peoples as a whole are not "well" in this sense and are forced to remain as some of the most oppressed and impoverished of the Canadian population. The variables that influence the overall health of a people is essential to recognizing the root causes of social inequality and the structures that maintain forms of marginalization. As I see it, there is no reason that Canada, an affluent Western society, cannot afford or care enough, to ensure that *all* its people have the same access to such an essential component to life. However, the examples of inequality and structural violence found within water management is only one depiction of the inadequate quality of life of Indigenous peoples in Canada and speaks volumes of the need to absolve colonial relationships in this nation, for the equitable and ethical treatment of all its citizens.

NOTES

¹ See: Circle of Blue

<http://circleofblue.org/waternews/>

² See: Canada-Wide Strategy for the Management of Municipal Wastewater Effluent and Environment Canada's Propose Regulatory Framework for Wastewater: Impacts for First Nations Communities (Assembly of First Nations 2008); Proposed Elements of First Nations Safe Drinking Water Act (Indian and Northern Affairs Canada 2009); First Nations Bill Tabled: <http://www.cbc.ca/politics/story/2010/05/26/first-nations-water-bill-to-ries.html>; and, A Review of the Engagement Sessions for the Federal Action Plan on Safe Drinking Water for First Nations (Safe Drinking Water Foundation 2009).

³ As of June 30, 2010 there were 114 Indian Reserves on boil water advisories in Canada: www.hc-sc.gc.ca

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