

Alberta Water Supply Essay
The Milk River Watershed

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As private irrigators, the Alberta ranchers, farmers and industry groups located in the Milk River watershed area have out of necessity self-managed their water supply from the river for over 100 years. The realities of a naturally dry climate prone to drought, trans-boundary water rights, and mounting environmental concerns, make the ongoing responsibility to maintain and manage this supply of water to meet socio-economic needs an increasingly urgent challenge (Gilchrist, 2009).

While Canada is perceived to have an abundance of water, southern Alberta did not fare well in that natural lottery (Elliot, 2007). Admirably, the Government of Alberta has renewed its 2003 *'Water for Life Strategy'* to put continued emphasis on ensuring the safe supply and protection of our water resources. The Alberta Water Council was created to carry out this mandate — through 11 local Watershed Planning and Advisory Councils (WPACs) — using the best available scientific, technological and intellectual efforts to develop provincial water management strategies (Water for Life, 2009).

Unfortunately for Alberta's smallest watershed, the modern tools to effectively manage the Milk River water supply are still as limited as the resource in question. Based on substantial science, research, and measurement evidence, the Alberta government should act now to provide water management facilities for the Milk River watershed as one necessary conservation solution, and as a foundation for the best utilization of our water apportionment.

The southerly drainage of the Milk River into the Gulf of Mexico is at the heart of the history and debate over a supply resolution. By meandering north out of Montana, into Alberta for a mere 180 kilometres, and then back down into Montana, the river's water management is defined by an international law. The Boundary Waters Treaty of 1909, administered by the International Joint Commission (IJC), and the subsequent Order of 1921 set the parameters for shared use based on prior rights and annual apportionment (Pentland, 2006; Milk River: State of the Watershed, 2008). The contents of the Treaty have repeatedly been called into question but a 2006 cross-border Task Force has recommended that fostering future water management progress is more important than debating past history (Halliday and Faveri, 2007).

This history reveals the critical issue that contributes directly to the ongoing annual water supply problem for the Canadian side of the border. The 1921 Order contained recommendations for three upstream storage facilities to be established in the Milk River watershed (Halliday and Faveri, 2007). Shortly thereafter, Montana constructed the US Fresno Reservoir to provide a reliable source of downstream water for irrigation. Although a joint storage project at St. Mary Lakes was deemed unfeasible, the Americans did construct a dam and canal system in the area to divert water from the St. Mary to the Milk River (DNRC Avezedo, 2009). Unfortunately, Alberta still lacks any significant on-stream or off-stream storage facility 88 years later (Alberta Environment, 2004). Interestingly, although the threat of drought suggests each side needs a greater share, neither country can

currently use their full allotment because they cannot control the water when it is available (Gilchrist, 2009).

Local users are well aware of promoting the importance of water in healthy ecosystems. Through the evolution of two key non-governmental multidisciplinary groups — the Milk River Watershed Council Canada (MRWCC) in Alberta and the Milk River Watershed Alliance (MRWA) in Montana — there have been many proactive steps taken to improve agricultural irrigation and conservation practices (MRWCC, 2009; MRWA, 2009). Dependence on the river has instilled in both groups a respectful approach to sustainable economic development in an area that is the custodian of both historical sites and ecological reserves (Milk River: State of the Watershed, 2008).

Due to the commitment by both groups to communicate for mutual benefit, the Treaty terms should no longer be a distraction that impedes real progress. As the MRWCC Chairperson, Tom Gilchrist states, “The Treaty will not produce more water”, putting the focus firmly on defining a water management plan for this shared resource (Gilchrist, 2009). The local stakeholders are actively engaged; the challenge is getting political action in Canada to provide a storage option as the key piece of the puzzle.

The state and federal bodies in the United States are involved in making progress toward management resolution for the Milk River on their side of the border. Both the Department of Natural Resources and Conservation (DNRC) and the Bureau of Reclamation (USBR) have mobilized with the Blackfoot Tribe, primarily to address infrastructure on the St. Mary Canal system that controls the bulk of water movement from the two rivers for irrigation, municipal, and many other purposes (DNRC, 2009; MRWA, 2009).

In contrast, the Alberta Government has yet to publicly release the results of their own 2003 storage feasibility study — subsequent to one in 1986 by the Prairie Farm Rehabilitation Administration — regarding storage options for the watershed (Alberta Environment, 2004). With the overlap in federal/provincial water responsibilities, there is a long history of broken dialogue, studies, and reports that ultimately demonstrate a lack of real commitment to resolving this water management issue in an area of Alberta that is world-renowned for its agricultural exports. A stable, relatively sparse population and static economic activity are not the sources of increasing environmental impacts in this area (Milk River: State of the Watershed, 2008). Instead, both levels of government should be acting swiftly to counter the effects of climate change, to address the immediate need for conservation efforts, and to anticipate the potential First Nations claims on water as a natural resource right in this watershed (Rood, 2007).

An abundance of experts and advocacy groups are providing information on the urgent need for water conservation initiatives. Notably, the Alberta Water Council highlights the need to ‘safeguard our water sources’ through monitoring ecosystem degradation, integrating water and land management, and innovation and best practices. They have stated a need to ‘accelerate action’, through clarification of roles, responsibilities, and

accountabilities, through data collection, analysis and reporting, and through public awareness to generate a shared commitment to water issues (Alberta Water Council, 2008).

Fortunately, and to the credit of the Milk River Watershed Council of Canada, the Alberta government is well equipped on all these fronts. It appears the MRWCC — made an official WPAC in 2006 (Watershed Planning and Advisory Councils, 2009) — had an advance copy of the government script as they have arguably addressed all these priorities over the years with proactive and technical initiatives that endorse their current water management practices. They share similar objectives of ensuring a reliable supply of safe, secure drinking water and maintaining healthy aquatic ecosystems. Their snapshot report, 'Milk River: State of the Watershed 2008', illustrates the full menu of local initiatives that highlight their desire to engage the public to create conservation awareness through self-monitoring, environmental research projects, and data gathering and benchmarks. The balanced approach to water management and quality strategies, biodiversity, riparian protection, and economic development convey an enviable level of coordinated commitment to solving problems for the future. The missing link is still an Alberta water storage and/or diversion facility to manage the Canadian stretch of the river, both when it is at high flow and when low flow underscores the need for a strategic use of the available water.

One extensive review of the Milk River watershed debate, examined from the perspective of public policy (Elliot, 2007), concluded that a water storage facility in Alberta might not be the best water management strategy. This review of several location/structure options also commented on various studies; however, the three reasons the author questioned the feasibility were all based on the high cost (in dollars and regulations) of involving the provincial and federal governments.

On a similar note, Water Matters, an emerging Alberta water advocacy group recently completed a survey of watershed leaders in the province. The results revealed a consistently high level of concern for the health of aquatic ecosystems, and a direct correlation to conflicts between watershed planning and land use decision making as a complicating factor. As well, the survey results cited the lack of clear government roles, coordination efforts, legislation, enforcement and public communication regarding watershed issues, concluding that political will is the key ingredient urgently required to effect protection for watersheds (Water Matters, 2008).

The clock is running and it is agreed by all that the conservation of water is a high priority. The Alberta government must ensure that their own good intentions of stated water strategies don't complicate the real progress achieved by the NGO Milk River groups to date. Despite the small size of the Milk River in the overall watershed plan, the NGO's have demonstrated highly responsible water management expertise supported by valuable data and research initiatives that the government bodies should capitalize on for high priority decision-making.

Now formally endorsed by both the Alberta and Montana governments, the local Milk River groups are continuing to lead by defining a water management plan that would be a

requirement if a storage facility were to become a reality. The Montana-Alberta Water Management Initiative is the latest edition of cross-border efforts toward water supply solutions (MRWCC, 2008). Their April 2010 deadline to produce this integrated water management plan is yet another timely milestone for the benefit of both countries. If the results include new options such as water banking or creating water markets (Elliot, 2007), the groups are well positioned to address amendments to the Treaty through the IJC if deemed mutually beneficial.

The Alberta government needs to construct an appropriate Milk River water storage facility that will provide a basis for resolving supply and management issues into the foreseeable future. The NGO working groups have supported the Milk River watershed environment very effectively to date but are facing huge challenges to maintain best practices with diminishing resources and increasing environmental issues. With the Treaty apportionment conditions no longer in debate, the proactive management of this water source is the key to future benefits for all parties. Each country has substantial financial and planning challenges but Alberta's outstanding responsibility to provide a storage facility is a sore point that warrants an immediate resolution. On a positive note, having waited this long Alberta now has the opportunity to create a state-of-the-art storage facility that combines the best balance of economic, technological and environmental perspectives on river water management.

Alberta Environment must finally respond to the many voices of private interests that have worked to demonstrate the importance of water storage for the Milk River, and heed the call of their own experts to 'safeguard our water sources' and 'accelerate action'. Despite the possibility of future creative water management options, which will have their own inherent scheduling and approval process complications, there is an immediate need to create a storage solution as the most basic and effective tool – a gigantic water meter – to help capture, measure and manage the water use in the Alberta section.

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