

THE EVOLUTION OF WATER POLICY IN ALBERTA

To say that current water resources management in Alberta is not at all working would be too extreme. The concern with water resources management is that the current system may not work in the future. Simply put, changes are required to deal with a whole nest of emerging problems whether that be water shortages in the South Saskatchewan, the potential for growing conflict, the possible effects of climate change, and the need to ensure sufficient instream flows of water to maintain ecosystem integrity. To some extent, the need for change is also driven by the fact that Alberta has concentrated on managing the “paper”—water licenses—but not always the “resource”—the water itself.

This backgrounder is part of “From H₂O: Turning Alberta’s Water Headache to Opportunity,” a forthcoming research paper by Casey Vander Ploeg identifying Alberta’s water challenges and opening discussion on possible solutions.

Canada West Foundation is the only think tank dedicated to being the objective, nonpartisan voice for issues of vital concern to Western Canadians.

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The Early Years

In 1882, the region of Alberta became a distinct district within the Northwest Territories, but legislative jurisdiction remained with the federal government. Water use was governed by a system of “riparian rights” where landowners close to a body of water had first right to make a “reasonable use” of the water. With the construction of the railways and the beginnings of private irrigation, the need to move water further from its source made “riparian rights” less practical. A decade later, Canada passed the *Northwest Irrigation Act* (1894), which made changes to the governance and management of water for irrigation and other purposes.

Transfer of Water Ownership

The *Natural Resources Transfer Agreement* (1930) settled a long-standing concern of both Alberta and Saskatchewan by granting to both provinces legislative jurisdiction over all natural resources, including water. Soon after, Alberta passed the *Water Resources Act* (1931), which affirmed that all water is considered to be the property of the province, which would grant the rights to use water through government license.

Governance and Management Today

Alberta Environment is the provincial government department in charge of Alberta’s water resources, and governs and manages it through the *Water Act*

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(1999) and the *Irrigation Districts Act* (2000). All individuals, corporations, and municipalities must apply for a license to divert water, but water withdrawals for domestic or household use under 1,250 cubic meters (m³) annually are exempt. The license sets the maximum amount of water that can be diverted or withdrawn, and stipulates when, where, and for what purpose water withdrawals can occur. These licenses are often called a water “right” or a water “allocation.”

Water Allocation

Water allocation systems decide who gets to use what water, especially in times of scarcity. The heart of Alberta’s system is “prior allocation,” which is common in most western Canadian and American jurisdictions, and has been used in Alberta since passage of the *Northwest Irrigation Act* (1894). Systems of prior allocation grant the right to use water based solely on a “first-come-first-served” basis. Prior allocation is often called “first-in-time-first-in-right” or FITFIR. Systems of prior allocation grant first right over water to the first or most “senior” license issued. Water is allocated year by year based on the available supply, and then parceled out among users. A water license or allocation does not guarantee the right to water, however. An allocation only guarantees the right to take water if sufficient water is available. Under prior allocation, that right falls first to those who hold the oldest or most senior license, who have the right to use all of their water allocation before “junior” license holders can exercise their water right. In Alberta, private individuals, corporations, organizations, and municipal governments all hold water licenses. Some of the most important are held by Alberta’s 13 irrigation districts, which then transfer water to irrigators based on their amount of acreage. License holders do not pay for the water that they withdraw. In applying for a water license, a one time payment is made based on the volume of the water involved.

- **Advantages:** Under prior allocation, Alberta has been successful in harnessing its water resources for economic and social development. Prior allocation provides an assurance to water users that they will have enough water in the future to justify and recoup their investments in water infrastructure, whether that be a self-supply system or a modern and water-efficient centre pivot. Prior allocation provides a measure of economic security, and ensures that investments are made and used, rather than abandoned or made unprofitable due to a lack of water. Prior allocation

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is simple to understand, largely accepted, and allows everyone to know “where they stand.”

- **Disadvantages:** At the same time, no system of allocation is perfect. Prior allocation, left to itself, has no mechanism to share water in times of scarcity, does not prioritize water based on its intended use or purpose, and provides little incentive to conserve. Prior allocation does not easily address new water issues that may arise, and works against accommodating new needs for water or even the changing use of water. Prior allocation entrenches senior rights and a particular type of water usage at the expense of new usages—even if the new usage is more economically or socially important, beneficial, efficient, productive, or highly-valued. In times of scarcity, the ecosystem can also become compromised if the usage rate of allocations rise despite lower flows of water. However, government certainly has the option of restricting water taking during such times, and has often done so. The bigger concern during scarcity is a certain amount of inequity that comes with the system. In times of water scarcity, those with “junior” licenses may not be able to access water as “senior” license holders have the priority.

The Challenge

Some today argue that prior allocation is simply unable to cope with the new water issues and water scarcity emerging in Alberta. Allocations already issued were based on requests received at the time, and on what was viewed as an abundant and continually replenishing water resource. Existing allocations were based on what was thought to be a set flow, but water flows are proving less predictable and reliable, if not shrinking. As a result, Alberta is overdrawing on water. Can prior allocation—should it—be maintained within the context of an uncertain and diminishing water supply? If senior users start moving up toward their maximum allocation, others will be left out of the water game. There is a very real sense here that Alberta will hit the water wall. This prospect has prompted several important policy changes.

Recent Changes

In 1991, new water realities and anticipated challenges led to a review of provincial water policy. As a result, Alberta made a number of significant changes when passing the new *Water Act* (1999) and the *Irrigation Districts Act* (2000). While the

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seniority of all water licenses in good standing were protected, the system was augmented in several ways:

- *Statutory Preferences:* Prior allocation was modified by legislating a “statutory preference” for domestic and household water use. Household and domestic use of water now has the highest priority over all water allocations, and cannot be superseded by any other user regardless of license seniority.
- *Perpetual vs. Term Licenses:* Older licenses issued by the province were “perpetual” licenses held indefinitely. The province now issues only “term” licenses that expire, or must be renewed, at the end of a specified period. These new “term” licenses are typically valid for a period of five years. When deciding to issue a license, Alberta Environment considers the potential impact of the new license on the environment and the need to maintain instream flows, the impact of the new license on existing license holders, and the impact on the province’s ability to meet interprovincial and international water sharing agreements.
- *Trading Water Licenses:* Under the *Water Act* and the *Irrigation Districts Act*, the province opened the door to temporary and permanent trades of water allocations held under license. Water “rights” were separated from the land to which they were traditionally attached, and license holders were allowed trade—sell or buy—portions of water allocations held by others.
- *Inter-Basin Transfers:* At the same time, Alberta prohibited the “inter-basin” transfer of water—water moving from one of the province’s seven major river basins to another major river basin. Any such transfers in the future will require a special act of the legislature. However, “intra-basin” transfers—water moving from one sub-basin (e.g., the Bow) to another sub-basin (e.g., the Oldman) are not expressly prohibited.

A Shift in Thinking

In the past, Alberta has generally pursued a policy of supply management by constructing dams (there are 1,400 in the province) storage reservoirs, and irrigation works. The policy thrust was to secure adequate supply and harness the water resource. Water policy was pursued less as an objective in its own right,

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but as the handmaiden to economic development, whether that be agriculture, industry, commerce, or transportation.

The growing preoccupation now is with sustainable development, and the drive to reconcile future economic development with environmental protection. A clear objective, outlined in both the *Water for Life Strategy* and the province's new *Land Use Framework*, is to protect the larger ecosystem by pursuing economic performance and the efficient use of water.

Thus, the focus has turned toward demand management, conservation, increased efficiency, and higher water productivity. Such efforts have been pursued through new government rules and regulations—the “command and control” approach—that have seen new water allocation rules, caps on the issuing of new allocations, regulations limiting the allowable land under irrigation, and new limits placed on certain activities such as oilfield injection, which require the use of poorer quality or brackish groundwater over fresh surface water whenever possible. ■

Sources:

Alberta Environment. 2009. *Legislative History of Water Management in Alberta*.

Alberta Environment. 2005. *Dam Safety*.