

**ALBERTA INNOVATES – ENERGY AND ENVIRONMENT SOLUTIONS**  
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*EVALUATION OF EXISTING LEGAL INSTRUMENTS TO PROMOTE  
INTEGRATED WATER MANAGEMENT DECISION MAKING*

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**A LEGAL AND INSTITUTIONAL ANALYSIS OF  
ALBERTA'S WATER ALLOCATION SYSTEM**

**THEME #1: THE PRINCIPLE OF PRIOR ALLOCATION  
AND WATER MANAGEMENT IN ALBERTA**

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## **PREFACE**

The past decade has seen an unprecedented amount of critical commentary on the law relating to Alberta's water allocation system. In 2013, Alberta Environment and Sustainable Resource Development conducted a Water Conversation with the public throughout the Province. Some of the water conversations reiterated themes found in the commentaries of recent years.

Two themes in particular emerged from the recent discussions that are vital, because they challenge fundamental principles of the Alberta Water Act. The first is the principle of prior allocation, often described as FITFR or First in Time, First in Right. The second is an attack on how Alberta permits water to be transferred from existing licensees to new users.

This study deals with these important issues in two parts. This paper will discuss the principle of prior allocation. A companion paper will discuss the methods by which water allocations can be transferred from existing licensees to new users.

## **INTRODUCTION**

This paper will examine the role of the principle of prior allocation in water management in Alberta in four sections.

Section A will describe the elements of prior allocation in granting licences to divert and use water as they have evolved over almost 120 years. Instead of taking the conventional approach of first describing the principle and then considering the recent critiques, the paper will adopt a functional viewpoint. This section will briefly describe the nature of the prior allocation principle and how Alberta deals with three central elements of water law. It will test the validity of the major lines of criticism of each element.

Section B will focus on the application of the principle of prior allocation in rationing water in times of drought. It will deal with how the principle has functioned in practice over the years and the rise of water sharing agreements to deal with water shortages.

Section C will enquire whether prior allocation is a barrier to the creation sensible water management schemes in the province. It will do so by examining whether and to what extent prior allocation can accommodate the implementation of water management schemes developed by stakeholders. It will test the existing law by taking as an example the recently developed Bow River Project, which seeks to manage one of Alberta's most important rivers in a fundamentally new way and investigating whether it can be implemented under the existing law.

Section D will briefly consider the complexity of reforming Alberta water law in the context of some of the changes that have been suggested in the critical commentaries and in the Water Conversation.

## **A. PRIOR ALLOCATION AND THE GRANT OF WATER RIGHTS**

This section of the paper will describe three elements of the doctrine of prior allocation in Alberta. It will discuss in turn the issuance of water licences, the duration and nature of rights held under water licences and the relationship between licences and the public interest.

### **1. The Allocation of Water Rights: Not Quite FITFR**

Although the present author has frequently used the phrase “prior allocation” to describe Western Canadian water law, it is somewhat misleading. The term suggests that the two elements, allocation and priority, are of approximately equal importance. In fact, the early Canadian legislation was almost totally preoccupied with the allocation of secure water rights, free from the threat of interference from riparian owners. The principle of priority in time was of minor importance. Although it appears startling as a matter of theory, it has played only a minor role in the application and development of Canadian water law up to the present day.

The dominance of the role of allocation and the secondary function of the priority principle can be traced to the very beginning of modern Western Canadian water law in 1894. The North-west Irrigation Act was passed in order to address a pressing problem that arose under the prevailing English common law. At common law, only riparian owners had the right to divert and use surface water. When European agricultural settlers began to arrive on the Canadian plains, the region was in the midst of a serious drought. It became clear that in many locations, farmers needed to irrigate their land in order to carry on agriculture. The doctrine of riparian rights effectively sterilised land that was distant from watercourses during droughts, because it prohibited any use of water, except by those who owned land that bordered rivers or lakes. It even discouraged the full development of riparian land. Under the strictest English version of the doctrine, developed in a land where water shortages were rare, riparian owners

could divert water required for domestic use but they could use water for other, non-domestic purposes (such as large-scale irrigation) only if their use did not substantially diminish the ordinary flow of the river.<sup>1</sup> As a result, the central purpose of the 1894 Act, as described by the Minister of the Interior in introducing the legislation was “the total suppression of all riparian rights in water.”<sup>2</sup> One historical commentator stated that “the abolition of riparian rights ... was, of course, the most important point of the Act.”<sup>3</sup> Although the Act failed to achieve this goal completely, it ensured that those who obtained a licence from the government could use water wherever their land was located, even if it was distant from watercourses, without infringing the rights of riparian owners. The Act accomplished this purpose in two steps. First, it declared that the property in and the right to the use of all water was vested in the Crown.<sup>4</sup> Secondly, on this foundation, the government then proclaimed that no person had the right to divert and use water unless he or she obtained a licence to do so from the Crown. The only significant exception to this rule allowed the owners of riparian land to use water for statutorily designated domestic purposes without a licence.

The main function of the original legislation was thus to radically reform property rights by removing the monopoly over the use of water that had previously been enjoyed by riparian owners. The bulk of the Act dealt with the allocation of water rights under licences to users of water, both riparian and non-riparian. The principle of priority was an ancillary to this overriding purpose and was unimportant in the first 90 years of the Act’s existence, as will be described in Section B of this paper.

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<sup>1</sup> David R Percy, *Water Rights in Alberta* (1977) 15 *Alberta Law Review* 142, 143-144.

<sup>2</sup> *Id.* at 157.

<sup>3</sup> C S Burchill, *The Origins of Canadian Irrigation Law* (1948), 29 *Canadian Historical Review* 353, 362.

<sup>4</sup> *North-west Irrigation Act*, 57-58 *Vic. c.30*, s.4, as amended in 58-59 *Vic. c.33*, s.2.

The complex provisions for granting water licences in the North-west Irrigation Act posed significant administrative challenges. Licences were issued in Ottawa for projects located thousands of kilometres to the west and communications were slow. Early licence documents suggest that administration was haphazard, both on the part of the government and unsophisticated water users. At this time, licences typically authorized the diversion and use of a fixed quantity of water per year, at a specified rate of diversion. In irrigation licences, for example, different rates of diversion were often stipulated depending whether the river was at the flood stage, the high water or the low water stage. However, the vital element was that licensees were entitled to divert water under the conditions set out a licence without any risk of interference from riparian owners. In addition the rights obtained by the licensee were secure. The Act contemplated the reduction of the quantity of the allocation only in the rare event that the works of the licensee were incapable of carrying the full licensed quantity of water or where the licensee was deemed to have wasted water.<sup>5</sup> The Minister could cancel a licence only where the licensee had committed some misdeed, such as a violation of the Act or Regulations or a breach of a term of a licence. In addition, a licence could be cancelled where a licensee ceased to exercise its licensed rights, but not where the licensee used only a portion of its rights.<sup>6</sup>

This method of granting allocations had the virtue of simplicity, but it was also crude. If we were to invent a new system of water allocation today, we would be unlikely to grant licences that entitled the holder to a fixed volume of water. As Henning Bjorlund has pointed out, probably the most effective scheme would be to grant each licensee a percentage share of the

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<sup>5</sup> The Water Resources Act, R S A 1970, c.88, s.53(1). This 1970 Water Resources Act is cited as the last provincial version of the Act that fully reflected the principles of the original federal legislation.

<sup>6</sup> Id., at s.54.



available flow of a water body.<sup>7</sup> Any system that allocates fixed quantities of water can run into trouble if the actual flow of water is less than was expected at the time that entitlements were initially established. Under the most sophisticated schemes in which water allocations are defined as a share of flow, a forecast is made of the amount of flow that will be available for consumption in a particular season and each user can withdraw only its percentage of the available flow. In Western Canada, the share of flow idea would have to take into account the seniority of licences. Bjorlund suggests granting licences into “bands of priority” of high, medium and low security licences. Licensees with high or medium priority would receive a larger share of the flow, to reflect their priority, rather than a proportionate share of the total licensed allocations in a particular basin.<sup>8</sup>

In an ideal world, defining water allocations as a share of the available flow would be an improvement on fixed volume licences. However, as Bjorlund points out, reformers do not start with a clean slate and his proposal would cause a high degree of anxiety among senior licensees.<sup>9</sup> The system he describes was adopted in Australia, which recently faced a water crisis so severe that the citizens of Adelaide were told that critical human needs for water might not be met in the future and the vital Murray Darling Basin was suffering severe environmental distress.<sup>10</sup> Even the threat of a crisis of this nature might justify a fundamental reform of water law. It is a matter of judgment whether climate change is likely to alter Alberta

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<sup>7</sup> Henning Bjorlund, *The Competition for Water: Striking a Balance among Social, Environmental and Economic Needs* (C D Howe Institute Commentary No.302, April 2010) 10. Interestingly, the water apportionment obligations under the Prairie Provinces Apportionment Agreement were set in percentage terms because of the experience of the Colorado River Compact, in which fixed volume shares were based on unrealistic assumptions of the total flow of the river system. See David R Percy, *Resolving Water-Use Conflicts: Insights from the Prairie Experience for the Mackenzie River Basin*, C D Howe Institute, Commentary No. 341, February 2012 at 6.

<sup>8</sup> Bjorlund gives the example of the a person who holds a senior licence to 1000 m<sup>3</sup> of water in a river, with a total licensed volume of 1,000,000 m<sup>3</sup>., Rather than having entitlement of 0.1% of the available water, the senior licensee might get a 0.2% share, while a Junior licensee might receive only a 0.03 or 0.05% share. Id.

<sup>9</sup> Id.

<sup>10</sup> Nicholas Breyfogle, *Dry Days Down Under: Australia and the World Water Crisis*, 3 *Origins*, Issue 7 (April, 2010), <http://origins.osu.edu/article/dry-days-down-under-australia-and-world-water-crisis>, accessed November 13, 2013.

water supply so as to justify such a radical reform. A major study of the South Saskatchewan River Basin suggests that this may not be the case. It pointed out that the median use of the basin consumed 22% of the median annual flow and that Alberta has always met its obligations to Saskatchewan by delivering an average of 81% of the portion of the available flow. The study suggested that the river system showed a considerable level of resilience in some climate change scenarios.<sup>11</sup> The introduction of water allocations based on a proportionate share of the available flow might also discourage the promising initiatives for the cooperative management of shortages, which are described in sections B and C of this paper. The proportionate share system is an option, but one which requires a careful weighing of the extent of the need for reform, the costs of implementation and the value of any resulting benefits.

There is no doubt that the federal legislation often provided licensees with allocations that were both large in scale and secure in tenure. As the Water Act protects all water licences that were issued before January 1, 1999, these licences remain vitally important to the present day. Not surprisingly, much of the recent commentary has been highly critical of the nature of these licences. However, their continuing importance requires us to examine their central features with absolute clarity, especially in relation to their duration and nature and the role of the public interest, including their relationship to environmental goals.

## **2. The Issuance of Water Licences: Three Misconceptions**

### **a. The Nature of Water Licences: Licences do not Create Property Rights**

Broadly speaking, it is theoretically possible that water licences may be seen as granting property rights, contractual rights or statutory permissions. The legal capacity of the government to deal with existing licences differs according to their classification. In order to determine

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<sup>11</sup> South Saskatchewan River Basin in Alberta –Water Supply Study, Summary, (2010) at 16, 17, available at [http://www1.agric.gov.ab.ca/\\$Department/deptdocs.nsf/all/irr13053/\\$FILE/ssrb2010.pdf](http://www1.agric.gov.ab.ca/$Department/deptdocs.nsf/all/irr13053/$FILE/ssrb2010.pdf). Accessed November 13, 2013.

which category they fall into, it is necessary to examine both the words of the Act and the language used in the licence.

If rights granted under a water licence amount to property rights, two legal consequences would follow. First, licensees could enforce their rights against the whole world, not just against the party which granted the rights, in this case the government.<sup>12</sup> Secondly, if the government were to cancel or extinguish those rights, there is a presumption that the affected licensees would be entitled to compensation. A water licence will only be interpreted as creating property rights, if the Act or the terms of a licence shows that the government intended to grant property rights. This determination of whether this was the government's intention is usually guided by examining whether the Act or the licence used the type of words that are normally found sufficient to convey an interest in land. The basic principle is that where a person or agency owns property, its ownership will continue unless it shows a clear intention to transfer all or part of its interest in the property to another.

There is no sign in the Act or in the terms of licences that the government ever intended to create property rights. The Water Resources Act, under which licences were created before 1999, stated that a licence merely allowed the holder "to divert and use water for any or all" the purposes listed in the Act. The Water Act authorises the Director to issue a licence "for the diversion of water, or the operation of a works."<sup>13</sup> A typical licence states that the holder is authorised "to divert and use water.... subject to the terms and conditions of the licence."<sup>14</sup> Language of this type grants licensee permission to use the Crown's water, but does not contain any suggestion that a licensee obtains a property right to the water allocated by the licence. In

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<sup>12</sup> Alastair R Lucas, *Security of Title in Canadian Water Rights* (Canadian Institute of Resources Law, 1990) 23.

<sup>13</sup> The Water Resources Act, *supra*, footnote 5, s.11(a); the Water Act, S A, 1996, c.W-3.5 s.51 (1)(b).

<sup>14</sup> See e.g., Licence # 19647, issued 1993-11-08. The terminology used licences varied over the years, but never suggested the creation of a property interest.

simple terms, it is similar to an arrangement in which a person might grant to someone else the right to use and operate her bicycle. This arrangement cannot mean that the bicycle owner has somehow transferred her ownership interest in the bicycle to the user. She has simply granted permission for the user to take her bicycle and put it to use. Similarly, it can be safely concluded that licences do not grant a property interest in water.

There is a slightly less remote possibility that a water licence might be classified as a contract, under which the licensee obtains the right to divert and use water in exchange for the payment of a nominal application fee. However, neither the Act nor the terms of the licences use any language to suggest that the parties intended to create the reciprocal obligations that are central to a contract. In addition, the Act gives “no hint of a power in the designated authority [the government] to conclude contracts.”<sup>15</sup> Professor A. R. Lucas is surely correct when he states that “water licences under the statute do not convey ‘contractual interests.’”<sup>16</sup>

As Professor Lucas suggests, as a matter of law water licences are surely no more than statutory or regulatory permissions<sup>17</sup> that grant the licensee the right to divert and use water, activities which would otherwise be illegal. Unlike the situation that occurs when government action deprives a person of an interest in land (where there is a presumption that compensation is payable), the government licence can potentially cancel or amend a water licence, provided that the legislation provides the necessary power to do so. If the government exercises this type of power, there is no presumption that the affected licensee has any right to obtain compensation unless the legislation contains express provisions to that effect. This principle is evidenced in the sections of the Water Act that allow the Director to suspend or cancel licences issued after 1999

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<sup>15</sup> Michael Crommelin, “The Legal Character of Petroleum Production Licences in Australia”, in Terrence Daintith (ed), *The Legal Character of Petroleum Licences: A Comparative Study* (Dundee: Centre for Petroleum and Mineral Law Studies and Energy and Natural Resources Committee of the International Bar Association, 1981) 60 at 75, quoted in Alastair R Lucas, *supra*, footnote 7 at 27.

<sup>16</sup> Alastair R Lucas, *supra*, footnote 7 at 27.

<sup>17</sup> *Ibid* at 32.

in two cases. First, the Director can suspend or cancel a water licence without compensation if there has been a significant adverse effect on human health or public safety, which was not reasonably foreseeable at the time the licence was issued. Secondly, the same power of suspension and cancellation exists if there has been a significant adverse effect on the aquatic environment that was not reasonably foreseeable at the time the licence was issued. In the second case, the affected licensee does have the right to obtain compensation, but this right exists only because the Act contains an express requirement that compensation must be paid.<sup>18</sup> In the first case, the Act does not mention the possibility of compensation and as a result, no compensation is payable. In contrast, if a water licence created property rights, there would have been a presumption that compensation was payable, unless the legislation expressly provided that there would be no compensation. In the second case, the government chose to make provision for the payment of compensation for cancellation, but it was under no legal obligation to do so.<sup>19</sup>

**b. The Duration of Water Licences: Licences are not Perpetual**

Until 1999, the government granted many water licences that did not contain any reference to an expiry date. Some commentators have concluded that this meant that water

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<sup>18</sup> The Water Act, S A, 1996, c.W-3.5 s.55(1)(j), s.55(2). An example of legislation that has chosen to permit the cancellation of water licences upon payment of only limited compensation in a jurisdiction that was originally governed by the federal Irrigation Act, see the original Saskatchewan Water Corporation Act, S S, 1983-84, CW-4.1, s.42(1). It allowed the cancellation of any water licence in the public interest. See now the Water Security Agency Act, SS 2005, c.W-8.1, s.54. In contrast to its predecessors, s.41 of this Act recognises the limited ability of a province to cancel a water licence issued by the federal government prior to 1930.

<sup>19</sup> A classic example of the government's power to terminate existing rights to natural resources, including water licences, was provided by the first version of the Alberta Land Stewardship Act, S A 2009, c.A-26.8. Section 11 of the Act permitted a regional plan to cancel a natural resource right granted under any other statute, but section 19 provided that no person had a right to compensation, except in the limited circumstances prescribed in the Act (that dealt only with conservation directives) or under some other statute. Although these provisions were controversial, there is little doubt that they were legally valid. Revised compensation rules were established in the Alberta Land Stewardship Amendment Act, S A 2011, c.9.

licences were granted “in perpetuity.”<sup>20</sup> This characterisation is both incorrect and misleading, because it carries the implication that future governments may have limited options in dealing with existing licences.

There is a world of difference between granting resource rights that are perpetual and granting resource rights without an expiry date.

As was shown in the previous section of this paper, in Alberta water licences probably amount only to statutory permissions. But if we suppose that licences are more than statutory permissions and assume for the moment that they grant contractual rights to their holders, we can pinpoint the difference between perpetual rights and rights granted without term. In a 1983 decision, the Supreme Court of Canada considered a 1905 agreement in which the government of Ontario had sold lands and water powers to a hydro electrical developer, which then built a dam on the Rainy River. As part of the transaction, the developer agreed to reserve 14,000 horsepower of power and to render that power *permanently* available for use by the town of Fort Frances, at a price not exceeding \$14 per horsepower. In the 1983 litigation, the successor to the hydro electrical company argued that it had a right to terminate the provisions of the 1905 agreement that dealt with the price and quantity of electricity to be supplied to the town. The Supreme Court of Canada found that this argument could not succeed because of the term in the agreement that required the power to be *permanently* available.<sup>21</sup> By essentially agreeing to supply the power in perpetuity, the hydroelectric developer had tied its own hands. In contrast, if the agreement had been made without any definite term as to its duration, it is clear in contract

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<sup>20</sup> Danielle Droitsch and Barry Robinson, “Share the Water-Building a Secure Water Future for Alberta” *Water Matters and eco-justice* (2009), 8.

<sup>21</sup> *Fort Frances v Boise Cascade Canada Ltd.*, [1983] 1 S.C.R. 171, 192.

law that it could have been terminated if either party had given reasonable notice to the other of its intention to do so.<sup>22</sup>

If we continue to assume, for the purpose of clarification, that water licences convey contractual rights, we must conclude that the absence of an expiry date does not mean that they are perpetual in nature. As a result, government could alter or terminate licences provided that the Act contained the necessary express power to do so. On the other hand, if, as is likely, water licences are merely statutory permissions (rather than contractual rights) there can be no presumption that they can never be changed. However, it must be emphasised that the Legislature would have to amend the Water Act in order to create additional powers to make changes in existing licences. Any such amendment that affected licences granted before 1999 would be controversial in nature, because those licences are presently immune from change under the Water Act.<sup>23</sup>

In order to clearly understand the nature of the rights held under a water licence it is thus important to note that water licences were never granted in perpetuity. This means as a matter of law that they can be altered more easily than many suppose, although the legal power must be exercised with a view to practical reality. The decision to grant water licences that did not expire was a deliberate choice, not a legislative oversight. Under the Act, large licences were originally granted to owners, such as railway companies, which held vast tracts of land. Most owners always intended to sell their land to settlers in irrigated parcels with a guarantee of a certain amount of water each season, so that there was some prospect that agriculture would flourish. Terminable water rights would have removed that guarantee.<sup>24</sup> In addition, despite their legal nature, those organizations that hold senior licences, which sometimes date back for over a

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<sup>22</sup> Stephen M Waddams, *The Law of Contracts* (4<sup>th</sup>. ed., 1999) at 361.

<sup>23</sup> The Water Act, S A , 1996, c.W-3.5 s.18(2).

<sup>24</sup> Debates of the House of Commons, June 17, 1920, 3695.

century, and users who obtain their water under those licences tend to regard them as perpetual. This means that although reform efforts are not subject to any legal limitations caused by the nature of licences, in practice they are likely to be met with the same level of opposition as if licences had in fact been granted in perpetuity.

**c. Licences and the Public Interest: Not Ignored, but Reflecting their Times**

The very large volumes of water granted under early licences and the high level of security enjoyed by licensees undoubtedly create some problems for modern water management. The privileged position of senior licensees has led to many criticisms from a variety of commentators. The initial line of criticism is factual: the Crown failed to protect the public interest in granting many early water licences and thereby encouraged excessive water consumption. Further criticisms address supposed shortcomings in the underlying principle of prior allocation. Writers have commented that prior allocation fails to allow the province to achieve a minimal level of environmental protection on heavily allocated rivers, that it does not permit the conjunctive management of surface water and groundwater and fails to protect the legitimate interests of First Nations. These are serious charges that must be addressed in considering potential reforms to the Water Act. This section will address each of those charges in turn.

**i. The Public Interest and the Granting of Licences**

Some recent commentators object that the significant level of protection to senior water licences created by the Act is made worse because of the “failure [of the Crown] to protect the public interest in the granting of water licences.”<sup>25</sup> According to the commentators, this failure takes two main forms. Administrators did not discourage the excessive use of water by limiting a licensee’s allocation to the amount of water that could be put to beneficial use and by

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<sup>25</sup> Danielle Droitsch and Barry Robinson, *supra*, footnote 6.



prohibiting the waste of water by licensees. In addition, they failed to meaningfully protect the environment in making decisions on granting water licences. These charges call into question the manner in which the Crown initially exercised its discretion in issuing licences and, because the priority principle enshrines those early decisions, the commentators argue there is a strong case for reform.

This paper will demonstrate that, as a matter of history, these charges are seriously overstated. While it is true that the Crown's discretionary powers over the grant of early licences were lightly exercised,<sup>26</sup> the elements of beneficial use and waste were at the forefront of the licensing system. In the case of environmental protection, neither the Act nor the term of licences entirely ignored environmental protection. The most that can be said is that the Crown strongly applied the public interest of the time, as it did with other policies designed to encourage settlement, such as allowing access to public rangelands and homesteading legislation. Of course, the public interest today may have changed, but the Act does not prevent the implementation of new environmental goals.

## **ii. Beneficial Use**

As indicated in the preface to this paper, it has become common in recent years to refer to the principle of prior allocation as FITFR, or First in Time, First in Right. Although the original version of the American doctrine of prior appropriation can properly be described as a FITFR system, the emergence of the acronym in Canada can be misleading. In order to examine the merits of the current line of criticism, it is necessary to explain briefly some of the differences between the closely related American and Canadian doctrines.

In Canada, it has never been possible for a water user to obtain a water entitlement or to determine the extent of that entitlement at one's own initiative simply by putting water to use.

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<sup>26</sup> David R Percy, *supra*, footnote 1, at 163-4.

Before 1894, only riparian owners had any right to divert and use surface water. After the passage of the Act, except for riparian and other minor uses, it has only been possible to acquire the right to divert and use water by obtaining a water licence through an application to a government agency. The agency has always been required to evaluate applications and has had the discretion to grant a licence and to make its own decision on whether to issue a licence and, if so, how much water to grant to an applicant. In addition it has exercised its power to set the conditions under which the rights granted by the licence could be exercised. One early commentator in fact stated that the central principle applied in allocation decisions was “the most beneficial use of the water in the public interest.”<sup>27</sup> In contrast, under the original doctrine of prior appropriation, water users obtained water rights entirely through their own initiative, without any government supervision, through the mere act of putting water to beneficial use. What was then the measure of the water right acquired by this method? In order to prevent the appropriator from claiming too much water, or even all the water in a given area, Western American law limited the extent of the water right to the amount that could be beneficially used. In practice this meant that the appropriator’s water use was required to be “reasonable” or “reasonably efficient.”<sup>28</sup> In the words of two commentators “[b]eneficial use is perhaps the most important characteristic in defining a prior appropriation water right in the U.S.” It means that “the true measure of a water right may not be the amount of water prescribed in water right records, but only that portion which is put to beneficial use.”<sup>29</sup> However, the same commentators point out that Canadian legislation defines the measure of a water allocation as the quantity of water fixed by the licence and lacks the major tool of beneficial use to prevent

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<sup>27</sup> Per Gisvold, “Survey of the Law of Water in Alberta, Manitoba and Saskatchewan” (Canada, Department of Agriculture, 1956)28.

<sup>28</sup> David H Getches, *Water Law* (3<sup>rd</sup>.ed., 1997) 121.

<sup>29</sup> Danielle Droitsch and Barry Robinson, *supra*, footnote 6 at 14.

existing licensees from holding water allocations that exceed the amount that they can beneficially use.

This line of criticism both overstates the practical importance of the concept of beneficial use in the United States and neglects the fact that in Canada, there was no right to use water until the government determined that it was appropriate. The government (rather than the water user) determined the amount of water that the licensee was entitled to use. The decision was based on the principle of beneficial use and an assessment of the quantity of water that the licensee required for the licensed purpose.

Under the early Canadian legislation, the discretion to issue a water licence was guided by both procedural rules and regulatory provisions. In a marked departure from the principle of prior appropriation, the activities of the licensee were frequently restricted by the insertion of terms and conditions into licences. The procedural rules were designed to ensure that the agency had an adequate amount of information on which to base its decision. In the early years, an applicant was required to file detailed plans and specifications relating to its proposed project, all of which were open to public inspection in Regina. In addition, strong public notice requirements ensured that those who lived in the vicinity of the project were well informed of its nature and had the opportunity to submit protests for consideration by the Minister.<sup>30</sup> In contrast to prior appropriation, neighbours could object if they felt that an applicant was seeking too much water, though in practice it appears that few, if any, applications for licences were denied.<sup>31</sup> For most licences the amount of the allocation was left to the agency's discretion, but early versions of the Act specifically tried to avoid the risk that an irrigation licence might allocate more water than a project really required by adopting the concept of the duty of water.

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<sup>30</sup> The North-west Irrigation Act, 57-58 Vic. c.30, s.45.

<sup>31</sup> David R Percy, *supra*, footnote 1, at 164.

The duty of water was used in American law to calculate the amount of water that was required to allow a particular type of crop (often the crop that required the most water of those grown in a particular region) to grow to maturity. In the Canadian Act, the Minister was empowered to define the duty of water according to locality and soil. Theoretically, this required licence allocations for irrigation purposes to be based on a duty of water that was ultimately defined as 1.5 acre-feet of water per acre of land.<sup>32</sup> This rough and ready formula limited the risk that an irrigation licensee might obtain more water than could be beneficially used in a way that was not possible under prior appropriation.

In Canada, government supervision over the issuance of licences was intended to ensure that licensees obtained a reasonably suitable amount of water. Under prior appropriation, the requirement of beneficial use was meant to prevent those who claimed a water right through their own actions, without any regulatory oversight, from securing more water than they needed. The principle of beneficial use was not very effective in doing so. In practice, as long as the user's diversion works had the capacity to carry the water claimed (a provision which is also codified in the Canadian legislation) the beneficial use test was satisfied. Whenever a water user was actually using water, even in an inefficient manner, it was almost impossible to characterise the use as non-beneficial except in the most egregious case.<sup>33</sup> The principle of beneficial use only became practically important when existing water rights claimed under the prior appropriation doctrine came under state supervision. Administrators were then forced to review the extent of

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<sup>32</sup> Id. S.51. The first reference to the defined duty of water was found in the Regulations of 1895 (Order in Council, April 29, 1895, s.2. The definition was ultimately simplified to 1.5 acre-feet of water per acre of land in A. R. 91/58 s.11 (1). Nevada 's general duty of water was 3 acre feet per acre (David H Getches , supra, note 12 at 123) and in a particularly arid district was set as 4.5 acre-feet of water per acre of land (Nevada Division of Water Planning Nevada State Water Plan Part 1, Section 8, the Alpine Decree, <http://water.nv.gov/programs/planning/stateplan/documents/pt1-sec8.pdf> accessed August 15, 2013.) s.

<sup>33</sup> David H Getches, supra, footnote 12 at 118-120. This account cites a rare example in which a farmer who flooded grazing lands without any control for 24 hours each day was found to have exceeded beneficial use: *State ex rel. Erickson v McLean* 308 P.2d 983 (N.M. 1957).

the rights claimed by previously unregulated users. In a few flagrant cases administrators relied on the principle of beneficial use as a justification for not recognizing the full extent of rights claimed in existing records of water use. Canada was never required to face this problem, as a requirement of state supervision was in place before any large water rights existed. Although some Canadian licences undoubtedly granted larger allocations than the licensee required, it is difficult to imagine that the government would ever have granted a licence for the types of water use that were so extreme as to violate the principle of beneficial use in the United States.

### **iii. Waste**

The corollary of the requirement of beneficial use in American law is the prohibition of the waste of water. In a prior appropriation system, there can be no vested right to waste water. As some critics point out, under this principle “states must determine what uses of water are acceptable” and they advocate the adoption of a similar rule in Alberta.<sup>34</sup> The irony of this recommendation is that there was a statutory prohibition against wasting water that applied in Alberta for over a century. Indeed, it was identical to the American doctrine. As part of the general tendency of the Canadian legislation to codify many of the rules of prior appropriation, the Act allowed the Minister to declare a licence as forfeited in any case where the licensee had wasted water. Later versions of the act allowed the Minister to decrease the amount of a licensed allocation in the event of waste.<sup>35</sup> It might legitimately be asked why this superficially attractive power was dropped from the legislation. The answer is simple. The principle proved to be almost impossible to apply, in both Canada and the United States, wherever the holder of a water right was actually making some use of water. Courts never found that using more water than

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<sup>34</sup> Danielle Droitsch and Barry Robinson, *supra*, footnote 6 at 14.

<sup>35</sup> The original Act mentioned forfeiture for waste, North-west Irrigation Act, 57-58 Vic. c.30, s.27. The principle was fully set out in the 1898 redraft of the Act, North-west Irrigation Act, 61 Vic. c.35, s.33. It remained intact, with the power to amend licences in case of waste in the last consolidation of the Provincial Water Resources Act, R S A 1980, c.W-5, s.51(1)(b).

necessary, for example, by employing flood irrigation rather than more efficient methods, amounted to waste. Similarly, losses in canal systems and storage lakes caused by leaks or excessive evaporation typically did not constitute waste. Indeed, only flagrant examples have typically justified the diminution of a water right on grounds of waste, such as allowing water, “to run uncontrolled for twenty-four hours a day over grazing lands without an irrigation system” and without any float meters or controls of any kind.<sup>36</sup> In practice, the courts have made “many flowery pronouncements about the importance of preventing waste”, but have rarely cut back the amount of water being used.<sup>37</sup>

#### **iv. Environmental Provisions in Licences**

In addition to the regulatory power to limit the size of licences and to deal with wasteful practices, the legislation has always contained a number of methods of protecting the environment. Remarkably, the original version of the Act gave Cabinet the power to protect watercourses, through a provision which allowed the regulation of the extent of diversion from rivers and other bodies of water, and the protection of sources of water supply.<sup>38</sup> Admittedly, there is a large difference between creating a power and exercising it effectively. The first part of this section will discuss some small steps that administrators were able to take in the direction of environmental protection. The second part will examine the provisions that specifically allow licences to be issued for the protection of environmental values.

Even in the early years of administering water licences, the government inserted conditions into water licences that offered a minimal level of protection to watercourses that was

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<sup>36</sup> *New Mexico v McLean*, 308 P.2d 983 (N.M.) 1957, discussed by Janet C Neuman “Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use”, 28 *Envtl. L.*919, 937. See also the California case involving the loss of hundreds of thousands of acre-feet of water through inadequate delivery and distribution systems, discussed David H Getches, *supra*, footnote 12, 121.

<sup>37</sup> by Janet C Neuman “Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use,” 28 *Envtl. L.*919, 929.

<sup>38</sup> The North-west Irrigation Act, 57-58 *Vic. c.30*, ss.45, 38.

impossible to achieve under the original American doctrine of prior appropriation. For example, an early grant of water to the Canadian Pacific Railway for irrigation was subject to the restriction that no diversion was allowed to reduce the flow of water at the Bassano Dam to less than 100 cfs or such higher-level as the Minister determined.<sup>39</sup> The licence granted to Calgary Power at Lake Minnewanka required the licensee to release from storage a minimum continuous flow sufficient to meet the needs of Banff National Park.<sup>40</sup> It was also common for irrigation licences to restrict the maximum rate of diversion to times when the river was at the flood stage, with correspondingly lower rates of diversion imposed when the flow of the river was at the high water and low water stages.<sup>41</sup>

The development of hydro-electrical power was also important in the early years of water development in Alberta. Water power licences were more strictly regulated than other licences. They could be granted only for a maximum term of 50 years, although they were renewable, and the government retained important flexibility in water management. For example, the licensee was required to use or store water in such a manner as not to interfere with the maximum advantageous development of the power and other resources of the river, and to comply with any orders made by the Minister in respect of the control and regulation of the flow of the waters of the river.<sup>42</sup> Some licences were subject to future changes through the incorporation of the provisions of the Dominion Water Power Regulations that were “now or hereafter in force.”<sup>43</sup>

The charge that there was a failure to protect the public interest in the granting of water licences is a serious one that requires careful examination to pinpoint the defects in the present

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<sup>39</sup> Permit issued by the Department of the Interior to the Canadian Pacific Railway dated February 25, 1915.

<sup>40</sup> Lake Minnewanka Licence, May 14, 1947, condition 2.

<sup>41</sup> See, for example, the Permit, supra footnote 22. The stages of river flow were formerly defined by Regulation, as found in AR 91/58, s.15.

<sup>42</sup> Dominion Water Power Regulations, P C 4034, October 31, 1921, Canada Gazette, November 12, 1921, s.45 (maximum term of 15 years), s.73 (a) (b) (maximum development of the river and regulation of flow).

<sup>43</sup> Interlakes Final Licence, May 27, 1947. The references in this paper are to early water power licences, which may have been affected by a 1972 agreement with the Government.

legislation. Probably the only way that the charge can stick is if we say that the administrators of yesteryear failed to protect the public interest of today as judged today, from the standpoint of individual commentators. In fact, history suggests that administrators were diligent in pursuing the public interest of the time, as defined by the legislation and government policy. Until the 1960's there seemed to be a commonly held view that the major objective of government policy was to encourage the settlement of the Canadian prairies by ensuring that farmers had sufficient water to enable the successful pursuit of agriculture and to permit the growth of cities and the general economy through the provision of hydro-electrical power. In the years following the Great Depression, the policy was pursued through the activities of PFRA in combatting depopulation through the provision of measures to alleviate the conditions produced by severe drought. However, even at this stage, the government did apply oversight to both the volume of water granted and the conditions of its use.

The previous part of this section dealt with the role of public interest factors in allocating water licences. This part will analyze the extent to which the legislation itself protected environmental values. As mentioned above, Cabinet always had the power to protect watercourses, but water licences provided the main method of providing security to water uses. In common with the rest of western North America at the time, for most of its history the Act only permitted licences to be granted for consumptive uses of water and licences could only be issued for the diversion of water, which ruled out the protection of water in its natural state.<sup>44</sup> In 1971, Alberta created a major legal innovation when it allowed licences to be granted without the requirement of a diversion or impoundment, "to use water in its natural state for the purpose of conservation, recreation or the propagation of fish and wildlife or for any like purpose."<sup>45</sup>

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<sup>44</sup> See the 1970 consolidation of the Water Resources Act, R S A c.388, s.11(1)(a).

<sup>45</sup> S A 1971, c.113, s.5(c).



However, the effect of this amendment was limited in law and practice. As a matter of law, it could not protect minimum levels of instream flow in the heavily allocated river basins of southern Alberta because any natural state licence would be junior to all previously issued licences. As a matter of practice it was interpreted very restrictively by cautious administrators. Although the Act allowed anyone to apply for and receive a natural state licence, administrators were reluctant to take advantage of this innovation. Despite receiving a number of applications, in the 28 years leading up to the proclamation of the 1999 Water Act, the government issued only a single natural state licence. The conservation group which applied for the licence expended an enormous effort over a long period of time in pursuing its application and required the active assistance of the Department of Forestry, Lands and Wildlife before it was successful. Despite the fact that the legislation permitted anyone to hold a natural state licence, the Department of Environment would not allow the group to hold the licence in its own name and insisted that it was issued jointly to the group and the government of Alberta.<sup>46</sup>

The 1999 Water Act made it even more difficult to obtain a natural state licence through a provision which allowed only the government to apply for and obtain such a licence.<sup>47</sup> The device which offered such potential when it was enacted has thus not been a successful method for protecting water in its natural state.

### **3. Prior Allocation and the Goals of Water Management**

Outside of its role in the licensing process, the principle of prior allocation has been criticised for preventing the implementation of minimum levels of instream flow, failing to support the conjunctive management of surface water and groundwater and ignoring the water

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<sup>46</sup> David R Percy, "Wetlands and the Law in the Prairie Provinces of Canada" (Environmental Law Centre, Edmonton, 1993) at 82-86.

<sup>47</sup> Water Act, S A 1996 c.W-3.5, s.51(2).

rights of First Nations. It is important to examine each of these lines of criticism in order to assess whether fundamental changes to the Water Act are necessary.

**a. Instream Flow Needs**

In contrast to the practices of the last century, modern water management recognises that water allocation decisions are a two-step process. The first step requires a determination of the minimum flow that is required to protect the health of the aquatic and riparian environment of a river system. The second step involves allocating the right to divert and use only the quantity of water that exceeds the instream flow needs of the river basin. It is much easier to implement the two-step process in river basins in which few licensed allocations have been made. It is much more difficult in basins, like the South Saskatchewan River Basin, where licences already authorize the use of water to the extent that it is difficult or impossible to maintain the desired levels of instream flow. In Alberta, the statutory device of a water conservation objective is used to formulate minimum levels of desired instream flow.<sup>48</sup> The general water conservation objective for the South Saskatchewan Basin has been set at 45% of the natural rate of flow. However, because licences have been issued for amounts of water that far exceed 45% of the natural flow of the river, the present law puts the health of the river in the position of the most junior licence in years of low flow.<sup>49</sup> The law allows licensees to receive their full allocations, leaving ecological needs to be satisfied with whatever river flow remains. As Henning Bjorlund has pointed out, this undermines the protection of natural water bodies. If a basic level of

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<sup>48</sup> Water Act, S A 1996 c.W-3.5, s.1(1)(iii), s.15.

<sup>49</sup> Julia Ko and William F. Donahue, *Allocating Our Water: Changing to Meet the Public Interest* (Water Matters, Canmore, Alberta, 2012) at 7.

environmental protection is to be achieved, the water conservation objective should be satisfied before licensees can withdraw any water.<sup>50</sup>

Many commentators ascribe these results to the failure of the priority principle and conclude that “Albertans are stuck with a system that provides few opportunities to preserve river health.”<sup>51</sup> If this is the case, then there is a strong argument for fundamental reform of the Water Act. However, these criticisms confuse the prior allocation principle with some particular rules that are found in the Act. For example, the decisions to protect existing water licences and to grant compensation if the Director suspends or cancels a new licence because of a significant adverse effect on the aquatic environment were not compelled by the priority principle. Instead, they were the result of deliberate policy choices. Prior allocation is a method of distributing the available water to individual users. There is nothing to stop a government from establishing how much water is available for allocation. If the government decides that 55% of the natural flow of the river can be allocated, or that licensees can divert water only if a designated level of instream flow is maintained, it can pass an amendment to the Act with that effect. The distribution of the remaining water is then left to the priority principle.

Most commentators assume that in heavily allocated rivers, this solution would require the government to pay licensees significant amounts of money to reassert control over a public resource.<sup>52</sup> However, there is nothing in the principle of prior allocation that requires this result. As the discussion in section 2 (b) of this paper points out, it is a basic legal principle that the government has a duty to compensate a person only if legislation extinguishes a property right. A water licence is a statutory permission, not a property right. Even if a licence did create a

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<sup>50</sup> Henning Bjorlund, *The Competition for Water: Striking a Balance among Social, Environmental and Economic Needs* (C D Howe Institute Commentary No.302, April 2010) at 8.

<sup>51</sup> See, for example, Julia Ko and William F. Donahue, *supra*, footnote 44 at 8.

<sup>52</sup> *Ibid.*

property right, a rule that allows a licensee to divert water only in certain conditions would not create a right of compensation because it limits, but does not extinguish, the rights of the licensee.

It is always difficult to achieve the protection of minimum levels of instream flows in fully allocated rivers. In Alberta, if the government wishes to do so, it would need to amend some specific rules of the Water Act, but its actions would not be incompatible with the principle of prior allocation.

**b. Conjunctive Management**

Several studies have urged the need to rethink Alberta's allocation system because it, "like other versions of prior appropriation, treats surface water, as distinct from groundwater" and comments that "[t]his distinction is bad science and legal fiction."<sup>53</sup> This is a puzzling statement, for which the only authority is an article on the American law of prior appropriation.<sup>54</sup> It is generally true of some states whose water law is based on prior appropriation, but it is a totally misleading reflection of Alberta law as it has stood for more than 50 years. In 1962, Alberta became a leader in North America when it brought groundwater under the Water Resources Act.<sup>55</sup> As a result of this change, all new users of groundwater for other than domestic purposes were required to obtain a licence, together with existing users who were given a period of grace (which ultimately extended until 1978) to bring their uses under the provisions of the Act. It is thus simply incorrect to state that Alberta's allocation system treats surface water as distinct from groundwater. This has emphasised with absolute clarity since 1981, when

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<sup>53</sup> Jeremy Schmidt, *Alternative Water Futures in Alberta* (Parkland Institute, Edmonton, December 2011, 18; Julia Ko and William F Donahue, *supra*, footnote 44 at 8.

<sup>54</sup> Jeremy Schmidt, *supra*, footnote 48, at 18, footnote 4.

<sup>55</sup> The Water Resources Amendment Act, S A 1962, c.99, s.2.

the Act was amended to read that it applied to “all water on or under the surface of the ground.”<sup>56</sup>

The inclusion of groundwater in the Water Act does not mean that it has been possible to achieve the goal of conjunctive the managing groundwater and surface water. However, in river basins that suffer from the greatest pressure on water supply, there are strong examples in practice of treating groundwater and surface water as a single resource. The South Saskatchewan River Basin Plan, which is a plan approved by Cabinet under the Water Act, states that within the basin. “Groundwater that readily flows naturally under the ground to.... surface water bodies is... considered surface water.”<sup>57</sup> In making decisions on applications for licences or for the transfer of licensed allocations, the Director must consider existing, potential and cumulative hydraulic, hydrological and hydrogeological effects. As a guideline to the exercise of discretion, the Director is encouraged to ensure that the application does not create any significant adverse effect in these areas. These directives were recently applied in the Sentinel Well case, which arose in an area of southwestern Alberta where the government has reserved all unallocated water and it is no longer possible to obtain licences for residential developments. The Environmental Appeal Board affirmed the decision of the Director to reject an application from a developer for a groundwater licence, because of the Director’s finding that there was a connection between the proposed well and a nearby lake. In the view of the Board, there was uncertainty whether the well was hydraulically connected to the lake but, in the absence of

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<sup>56</sup> Water Resources Amendment Act, 1981, c.40, s.2(c). The same definition is found in the Water Act, S A 1996 c.W-3.5, s.1(1)(ggg).

<sup>57</sup> Approved Water Management Plan for the South Saskatchewan River Basin (Alberta Environment, August 2006) 1.

compelling evidence to the contrary, the precautionary principle justified the Director's decision.<sup>58</sup>

Many commentators advocate the conjunctive management of surface water and groundwater. Far from acting as a barrier, the Alberta Water Act is entirely conducive to conjunctive management.

**c. First Nations' Interests**

A recent study published by the Parkland Institute raises the fact that the Water Act is silent on the question of the water claims of First Nations. The study points out that First Nations' water claims precede the establishment of Alberta's entire water allocation system and urges that any reform of Alberta water law must, "at a minimum, seek to reconcile the long-standing marginalisation of indigenous rights to water."<sup>59</sup>

It is true that in the entire history of water allocation on the prairies since 1894, the legislation has made no mention of indigenous rights to water. Although the Act in both its federal and provincial versions did nothing to protect aboriginal rights, it also showed no intention to extinguish existing indigenous rights. This feature is potentially important, as it is clear that the Crown cannot extinguish aboriginal or treaty rights by implication. In addition, the administration of the Act did not entirely ignore aboriginal interests. In Alberta, Indian bands hold licences for a total of more than 80,000 acre-feet of water, with a variety of priorities, the most senior of which dates back to 1904.

It is also notable that aboriginal groups in the United States faced exactly the same problem as First Nations in Canada, because state water allocation systems also ignored the possibility that aboriginal rights to water might exist. In 1908, the United States Supreme Court

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<sup>58</sup> *Municipality of Crowsnest Pass v Director, Southern Region, Environmental Management, Alberta Environment* (23 December 2009), Appeal No.08-016-R (A E A B).

<sup>59</sup> Jeremy Schmidt, *supra*, footnote 48 at 15.

decided a celebrated case, which arose out of the creation of the Fort Belknap Reservation in Montana, in conditions that were virtually identical to those that prevailed in Canada. *Winters v United States* raised the question of whether settlers who held state water rights could maintain dams and reservoirs on the Milk River in any manner which prevented the waters of the river from flowing to the Reservation, where the Indian Band had begun to divert water for irrigation. The court noted that the reservations were created to further the government policy that Indians should become a civilised and pastoral people. However, without irrigation, the lands of the Reservation were practically valueless and certainly useless for agriculture. Although the settlers had begun to use water before the Indian band, the Supreme Court held that by necessary implication the Indian Band held a prior water right. It is now clear in the United States that the Indian reserved water rights cannot be extinguished, except by express legislation.<sup>60</sup>

The *Winters* decision has a compelling logic, but it has never been adopted in Canada.<sup>61</sup> However, as a matter of practice, the government of Alberta has begun to recognise certain previously unlicensed aboriginal claims to water. For example, in the South Saskatchewan Basin Water Allocation Regulation, the government reserved water in the Basin from further licensed allocations, subject to a number of exceptions. The exceptions initially included the provision of 55,000 acre-feet of water for the irrigation of land on Indian reserves.<sup>62</sup> This regulation has been largely subsumed by the Approved Water Management Plan for the South Saskatchewan River Basin. The Plan proposes the establishment of a Crown Reservation for three sub-basins, in

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<sup>60</sup> David H Getches, *supra*, footnote 12 at 309-311.

<sup>61</sup> In one recent case, it was argued that the government of Alberta had a legal duty to consult an Indian band about the South Saskatchewan River Basin Management Plan. The Indian band's argument was based in part on the *Winters* decision, but the Court of Appeal commented on the *Winters* case: "It is doubtful that the doctrine is applicable in Canada, as its application in the United States has been limited to states that regulate water through a system of prior appropriation – a system which has never existed in Canada" (*Tsuu T'ina Nation v Alberta* (Environment), 2010 ABCA 137, par.75. This reasoning was not necessary for the decision in the *Tsuu T'ina Nation* case. Although the observation that prior appropriation has never applied in Canada is correct, with respect, the judgment overlooks the functional similarity of prior appropriation and the Canadian principle of prior allocation.

<sup>62</sup> Alta Reg. 307/1991, s.5.

order to make unallocated water available for four purposes. The list of purposes includes making water available to First Nations Reserves. In addition, the Director, in exercising discretion over water allocation transfers and licence applications in the Basin, must consider “First Nation Rights and Traditional Uses.”<sup>63</sup>

As the American experience with aboriginal water rights shows, it is always difficult and disruptive to fit pre-existing aboriginal rights to water into state systems based on the priority principle. It is impossible to disagree with a comment that contemporary reforms must not reproduce historical injustices by ignoring First Nations claims.<sup>64</sup> For the moment, Alberta appears to be taking the approach of negotiating First Nations’ water claims with review to providing an adequate supply of water and reasonable assurance of priority. A landmark agreement was reached with the Piikani (or Peigan) Nation in 2002<sup>65</sup> and negotiations are now well underway with the Siksika Nation.<sup>66</sup>

## **B. RATIONING IN TIMES OF SHORTAGE**

From its beginnings in 1894, the Canadian legislation was intended to encourage settlement by allocating secure water rights that could be exercised without the threat of interference by the owners of riparian lands. The government recognized the obvious fact that it was about to issue licences in an arid region, in which many watercourses were seasonal in nature, and that it had to confront the possibility that at times there might not be enough available water to satisfy the allocations held by all licensees. It thus adopted the principle of priority in

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<sup>63</sup> Approved Water Management Plan for the South Saskatchewan River Basin (Alberta Environment, 2006) at 6 and 14-15.

<sup>64</sup> Jeremy Schmidt, *supra*, footnote 48 at 15.

<sup>65</sup> Merrell Ann S Phare, “Denying the Source: The Crisis of First Nations Water Rights (Rocky Mountain Books 2009) 1-6.

<sup>66</sup> Kelly Cryderman, Dam dispute settlement worth \$50M to Siksika band, *Edmonton Journal*, December 23, 2010 [http://www2.canada.com/edmontonjournal/news/cityplus\\_alberta/story.html?id=4b9fc09f-81d8-4ff5-b441-8ce17600fad0](http://www2.canada.com/edmontonjournal/news/cityplus_alberta/story.html?id=4b9fc09f-81d8-4ff5-b441-8ce17600fad0), accessed November 3, 2013.



time, which was a common feature of water law in many other countries<sup>67</sup> and particularly the doctrine of prior appropriation which was such a strong influence on the original Act.

The original legislation stated the general rule that applications for licences had precedence according to the date of filing and addressed the possibility that there might not be sufficient water to cover the requirements of all licensees. In this event, the first in time principle applied, so that a senior licensee was entitled to receive all of the water supply stipulated in its licence before a junior licensee had any claim to supply.<sup>68</sup> If a senior licensee made a complaint that another licensee was taking water in violation of the principle of priority, the Department was required to investigate and if necessary to close the works of the junior licensee to permit the senior licensee to receive its licensed allocation.

The principle of making water available in times of shortage according to the seniority of licences is startling at first sight. It suggests that, in times of serious drought, senior licensees, such as irrigation districts, will be able to use their large allocations expansively while municipalities with junior licences are unable to assure their citizens of an uninterrupted water supply. Some municipalities with large senior licences will continue to grow, while the growth of others with junior or inadequate licences will be limited, even if this result is contrary to the principles of good planning.<sup>69</sup>

It must be conceded that in theory these and other drastic consequences are possible because, as a matter of law, the principle of priority in time is the ultimate rule to be applied in

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<sup>67</sup> Stewart B Rood and Jenny Vandersteen, *Relaxing the Principle of Prior Appropriation: Stored Water and Sharing the Shortage in Alberta, Canada*, 24 *Water Resource Management* 1605, 1606 (2010).

<sup>68</sup> These rules were stipulated in the 1898 redraft of the North-west Irrigation Act, 61 *Vic. c.35, ss.8 and 25*. The original 1894 Act, which reflected the views of its framer, William Pearce, allocated water during times of shortage according to the purpose of the licence, as well as its date. *North-west Irrigation Act, 57-58 Vic. c.30, s.8 and 19*. It is almost certain that the original provisions were never applied because very few, if any, licences had been issued at that time and wet conditions prevailed for almost a decade after the 1894 Act was passed.

<sup>69</sup> Danielle Droitsch and Barry Robinson, *supra*, footnote 6 at 18.

times of shortage. However, a critique of the principle must take into account two realities. It must recognise that in practice it is very rare to find instances, even during serious droughts, where the priority principle has resulted in the cutting off of the supply of water to a major user. This is true both in Western Canada and, surprisingly, in recent years in the Western United States. It must also note that in recent decades, as many of the critics have observed, licensees have tended to share water shortages, rather than to insist on priority. In practice, almost universally, the priority principle has become a default rule that is applied in shortages only as the very last resort. The following sections will examine how the priority principle has applied in Alberta and the reasons why licensees prefer to share water during shortages.

## **1. Priority in Practice**

A major fear of those who are critical of the priority system is that water supply to municipalities which hold junior licences will be cut off in favour of senior irrigation licensees. There has never been an instance in Alberta, even during serious droughts, in which the supply of water to a major municipality has been cut off, or even involuntarily reduced. Indeed, the priority principle was rarely, if ever, applied, so as to require a licensee to close its source of supply until the early 1980's. Since that time, the principle has become relevant in two areas of the province. The arid south-east corner of Alberta contains a number of creeks in which the flow of water can be minimal in dry years or in the later months of a hot summer. The south-west corner includes the more important St Mary, Belly and Waterton rivers, where the effects of any drought are first felt.

The experience of dealing with water shortages in these two areas is marked by two factors. First, the application of the priority principle has not resulted in the water supply of non-agricultural uses being cut off. Secondly, in the south-west corner, when a severe drought in

2001 threatened the supply of water to towns, industry and irrigation, the priority principle played only a supporting role. As will be explained in the next section of this paper, with the encouragement of the Department of Environment, most licensees arranged to share the shortage. The priority principle resulted in cutting off water supplies to approximately 25 junior licensees who refused to join the sharing scheme.

The critics correctly wonder about what will happen if 2001 is a harbinger of future droughts and question both the fairness of the priority system and its ability to handle a more severe water shortage. At the very least, the 2001 experience means that junior licensees in drought prone areas should now fully understand the risk attached to their licences. They are able to fully utilise the licensed allocations in most years, but they can plan for the next drought by considering mitigation strategies in advance. If water is critical to the production of a highly valued crop, they can attempt to obtain a more senior allocation through the transfer system or make arrangements to receive an assignment of water licensed to another user if necessary.

It is beyond dispute that the principle of priority in time is a rarely used rule of last resort in Canada. It is more surprising that priorities are now seldom enforced in practice in the United States, especially on larger streams.<sup>70</sup> The priority principle has never been very important in Canada, but in the United States, it was viewed as the lynchpin of the doctrine of prior appropriation. Certainly priorities were applied in the United States much more frequently than they were in Canada, even in cases when it made little sense to do so.<sup>71</sup> Today, the priority principle has little practical relevance in rationing water in the United States during times of shortage<sup>72</sup> and it functions in much the same way as it does in Canada, as a shadow doctrine that

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<sup>70</sup> A Dan Tarlock, *Prior Appropriation: Rule, Principle, Or Rhetoric?* 76 N D L Rev.881, 883 (2000).

<sup>71</sup> David H Getches, *supra*, footnote 12, 101, 103-104.

<sup>72</sup> Reed D Benson, *Alive, but Irrelevant: The Prior Appropriation Doctrine in Today's Western Water Law*, 83 U. Colo. Law Rev.675, 678 (2012).

in future will apply only as a default rule to resolve small-scale conflicts or as a worst case enforcement scenario to encourage parties to find creative ways to avoid its actual application through negotiations.<sup>73</sup> In essence, the importance of the priority principle in the United States today, “lies more in the threat of its application rather than the application.” and the enforcement of priority “is more bluff than substance.”<sup>74</sup> As also occurs in Canada, those charged with enforcing priorities spend much of their time negotiating voluntary reductions, rotations or compliance schedules with water users during times of shortage, so that often holders of senior rights agree to use less than their entitlement to assure a source of supply to junior users.<sup>75</sup>

## **2. The Trend to Negotiated Solutions**

The common recent experience of Western Canada and the Western United States relating to the frequent failure to insist on the application of the priority principle contributes to the analysis of two important questions. Firstly, in both systems, why do holders of senior allocations negotiate the sharing of water during shortages instead of insisting on their priority? Secondly, if the strict doctrine of priority is not generally applied, is there any case for retaining it? If priority remains the default principle then there is a danger that if negotiations to share water fail, the supply of water will be cut off to those who licences which are junior, but which also fulfil for important social purposes.

The willingness of the holders of senior water allocations to negotiate water sharing agreements can be explained by a combination of communitarian, legal and political considerations.

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<sup>73</sup> A Dan Tarlock, *supra*, footnote 35, at 883.

<sup>74</sup> *Id.*

<sup>75</sup> A Dan Tarlock, *The Future of Prior Appropriation in the New West*, 41 Nat. Res. JI. 770,778.

Holders of water allocations work constantly in a community of water users<sup>76</sup> and learn to understand the needs of each other. One of the side-effects of the creation of water planning devices in the Alberta Water Act has been the growth of bodies in which most water users spend a great deal of time discussing the management of the watercourses on which they all depend. The two most high-profile examples of this development in Alberta have been the processes leading up to the development and continued implementation of the Saskatchewan River Basin Plan<sup>77</sup> and the Bow River Project, which will be discussed in detail later in this paper. These initiatives, together with River Basin Councils and numerous other stakeholder organisations have undoubtedly led to a much greater understanding of the reciprocal interests of water users in southern Alberta. Any senior licensee which chose to insist on the strict application of the rules of priority during a water shortage would incur the ill-will of other water users and quite possibly be unable to count on their cooperation or backing on other water management issues. As mentioned in the previous section, American regulators often work actively to encourage agreement among water users during droughts. The same is true in Alberta, where, unlike the situation in most states, the Director is also the gatekeeper when it comes to applying the priority principle. A licensee who wishes to enforce its priority must initially make a complaint to a Director designated under the Water Act. The Director's powers are described in discretionary terms,<sup>78</sup> and they thus provide the Director with some leverage in dealing with the complaint. There is a history in Alberta of Directors and their predecessors actively encouraging the sharing of available supplies during shortages, most notably in the serious drought that affected southern Alberta in 2001.

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<sup>76</sup> A Dan Tarlock, *supra*, footnote 35, 897.

<sup>77</sup> Approved Water Management Plan for the South Saskatchewan River Basin (Alberta) 2006. Available online at: [http://environment.alberta.ca/documents/SSrb\\_Plan\\_Phase2.pdf](http://environment.alberta.ca/documents/SSrb_Plan_Phase2.pdf).

<sup>78</sup> The Water Act, S A c.W-5, s.32.

There is also a legal risk in insisting on the enforcement of priority rules. The enforcement of priority in the United States almost always involves a court action. Because there have been no cases in which major junior users of water have been cut off by the priority principle in Canada, the provisions of the Water Act have never yet been put to the legal test. In the United States, a senior holder of water rights who chooses to enforce priority runs the risk that a court will examine closely the nature and strength of the water right. In a case in which the senior appropriator is seeking to shut off the supply of junior appropriators, a court might be tempted to examine in some detail the extent to which the senior appropriator is using water beneficially. As the previous account has demonstrated, beneficial use is not the measure of a water right in Canada, but a senior licensee still incurs some legal risk in enforcing priority. The enforcement of priority might ultimately end in court proceedings and, if it did, the court would almost certainly be required to examine all the records of the licence. The complexity of the early Canadian legislation and the scant administrative resources available to government means that some senior licensees may have difficulty proving their entitlement to a high priority, simply because the licence documentation does not always meet the requirements of the legislation as it stood when initial water allocations were granted. In addition, an Alberta court may note that the power of the Director to enforce priority is established in discretionary rather than mandatory terms and choose not to interfere if a Director decided not to close off the supply of a junior licensee.

Finally, a senior licensee seeking to enforce strict priority in Alberta would face a significant political risk if its action resulted were in cutting off the supply of water to a municipality or other major water user. One commentator has noted that in the United States it is unlikely to be politically acceptable to reduce substantially water deliveries to large cities based

on the principle of priority.<sup>79</sup> In Alberta, such an action would cause a political outcry. Such an outcry, combined with a general feeling of public unease about the priority principle, could well convince any provincial government to enact by statute a populist change to the rules of priority.

The observation that the principle of priority is not often applied so as to cut off the supply of water to major users creates a challenge to its continued existence. It can be legitimately asked whether there is any advantage in retaining a principle that is not much used and is likely to be contentious when it is used. Although for many people, the priority principle does not intuitively present the best solution for sharing water during shortages, it is probably better than the alternatives. It has the practical advantage of providing clear rules to deal with shortages so that all licensees know where they stand, unless a better solution can be negotiated. Licensees with a junior priority are encouraged to focus their attention on preparing for future shortages rather than hoping that an administrator will find a way to provide them with water.

In contrast, the most obvious alternatives to the priority principle are based either on treating water users equally or on allowing government to distribute water in the public interest during times of shortage. The alternatives appeal to some commentators, but they pose obvious practical problems when it comes to their application. In systems based on the equality of water users, such as the riparian doctrine that applies in the eastern United States, when a shortage occurs, the decision maker usually favours the prior use.<sup>80</sup> This result occurs in part because any other decision would require the removal of water previously applied by a senior user to fulfil the needs of a junior user. This type of decision is notoriously difficult to justify, except in the most strongly compelling case. Other systems rely on the government to allocate water efficiently and

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<sup>79</sup> A Dan Tarlock, *supra*, footnote 40, at 782.

<sup>80</sup> A Dan Tarlock, *supra*, footnote 35, 899.

equitably in times of shortage based on some notion of the public interest.<sup>81</sup> Saskatchewan enacted a variation of this approach in its original Water Corporation Act of 1984, in a Draconian amendment which allowed the Saskatchewan Water Corporation, with the approval of Cabinet, to cancel any existing water licence if it considered it to be in the public interest. The holder of the cancelled licence was entitled to compensation based on the residual value of the any works that were used to secure and transport water and that were made redundant by the cancellation.<sup>82</sup>

Some commentators endorse the creation of a power to alter water allocations in the public interest. It prevents, for example, the danger that water required by municipalities might not be available because of an irrigation licence that holds a senior priority. However, even in this case, the public interest test does not necessarily suggest that the municipality should receive the available water. A very close examination would be required before this determination could be made. Some “municipal” uses of water can be very wasteful, for example when they involve irrigating golf courses or operating car washes. Other municipalities have per capita consumption rates that are double those of their neighbours, or pricing structures that encourage excessive consumption. It is certainly not obvious that all municipal uses should take precedence and making water use decisions by applying a public interest test involves micromanagement at a time when swift decision-making is needed. It is extraordinarily difficult in practice to determine whether one use of water is more important than another, and many

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<sup>81</sup> A Dan Tarlock, *ibid* at footnote 34, quotes a recommendation from the Water Law Committee of the American Society of Civil Engineers as follows: “The State, in the exercise of its sovereign police power to protect the public interest in the waters of the State, undertakes to provide, through this Code, and orderly strategy to allocate available water efficiently and equitably in times of water shortage or water emergency.”

<sup>82</sup> The Water Corporation Act, SS.1983-1984, c.W-41, s.42. This Act underwent major amendments in 1997, 2002 and 2005, when it was replaced by the The Water Security Agency Act, SS 2005, cW-8.1. The provisions allowing the cancellation of licences are now found in s.54 of the 2005 Act.



prefer the clear application of the rules of priority to leaving the *ad hoc* determination of who gets water and who does not to a meddling bureaucrat.<sup>83</sup>

### **3. Negotiated Solutions in Alberta**

Water sharing agreements emerged during a series of hot and dry summers in the decade of the 1990's. They initially existed between irrigation districts situated on the Bow River, which agreed to draw down their stored water at agreed rates and thus to reduce their diversions from the river during the period of draw-down. These actions allowed more water to flow to the downstream districts and ensured that they could meet their immediate needs. The districts also agreed to refill their storage facilities in a coordinated fashion, so that they were all able to make use of the available stream flow and to ensure that their diversions complied with the terms of their respective licences. The initial agreements were extended in later years to ensure that holders of junior licences, which received their water supply through the works of an irrigation district, were able to receive a continuous supply of water when they might otherwise have been cut off under the priority principle. Under these agreements, each licensee agreed to divert less than its full licensed allocation to allow junior licensees, which included at least one municipality, to receive their full entitlements. These arrangements were essentially precursors to the assignments of water allocations which were created under the 1999 Water Act and which will be described in the next section. On the Bow River, these initially unofficial arrangements have now been replaced by collaborative discussions between the major licensees and government agencies during the period when most irrigation diversions occur.

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<sup>83</sup> James L. Huffman, *Clear the Air* 21 *Envtl. Law* 2253, 2256 (1991). For the classic account of the problems of determining water issues by reference to the relative importance of different uses of water, see Frank J Trelease, *Model Water Code, the Wise Administrator and the Goddam Bureaucrat*, 14 *Nat. Resources J.*207-29 (1974).

In 2001, a severe drought put to the test the ability of sharing agreements to cope with a serious water shortage. A lack of winter precipitation and a series of hot, dry summers meant that storage reservoirs on the southern tributaries of the Oldman River were drawn down to historically low levels in late 2000.<sup>84</sup> This chain of events inspired a series of meetings in 2000 to prepare for the possibility of water shortages in 2001. By May 2001, it was clear that there would be insufficient water to supply all licensees on the southern tributaries with their licensed allotments. In the face of impending shortages, the senior licensees on the system gave notice that they expected priorities to be strictly enforced during the drought, but they also signalled their willingness to share the threatened shortage.<sup>85</sup> Water supply forecasts indicated that if the priority principle were applied, 336 licensees with a priority dating after May 1950 would not receive their allocations of water.

A Basin Advisory Committee provided a draft water sharing agreement on May 9, 2001, based on the principle that all signatories must agree to share their licensed allocations and priorities. All water users in the basin were given the opportunity to join the sharing agreement. Ultimately, the Advisory Committee determined that farmers within irrigation districts would be restricted to using between 8.6 inches and 11.3 inches of water per acre (the figure varied because of the different efficiencies of each district) and all non-irrigation users would be limited to using 60% of their licensed allocations. Approximately 650 licensees ultimately joined the sharing agreement. One small irrigation district withdrew from the agreement and chose to rely on its senior 1923 licence for water supply throughout 2001. A second irrigator did not sign the

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<sup>84</sup> Stewart B. Rood and Jenny Vandersteen, *Relaxing at the Principle of Prior Appropriation: Stored Water and Sharing the Shortage in Alberta, Canada*, 24 *Water Resources Management* 1605, 1615 (2010).

<sup>85</sup> Alberta Environment, *Regional Service: Regional Water Administration Branch, 2001 Water Administration Summary Report, Southern Tributaries: St. Mary-Belly-Waterton Rivers*, 16-20.

sharing agreement, but respected its terms.<sup>86</sup> Some licensees who did not sign the agreement entered their own water sharing agreements and the priority principle was applied to shut off the supply of water to 63 non-participating holders of junior licences.

After the sharing agreement came into force, Alberta Environment carried out intensive inspections to ensure that its terms were being respected by water users. They noted that most of the 63 licensees against whom priority had been enforced had projects that were either inoperable or not being used in 2001.<sup>87</sup>

The sharing agreement was implemented through assignments of water under section 33 of the Water Act. This useful section allows a licensee to temporarily assign all or part of its unused allocation to another licensee by written agreement. An assignment can be executed quickly because there is no requirement of advance administrative approval and it can be implemented immediately, provided that there are no adverse effects on a water body or on the aquatic environment.<sup>88</sup> Under this scheme, senior licensees were able to assign to junior licensees, who may not otherwise have received any water, sufficient water to allow the junior licensee to use 60% of its normal allocation.

The sharing agreement was successful in enabling water users to survive a drought in which the basin received only half of its median annual flow. It required not only flexibility on the part of senior licensees, but also the active participation of the regulator in order to ensure that its terms were implemented in time to avoid a midsummer crisis. Clearly, the sharing agreement avoided the application of the strict priority principle, but the principle of priority also enabled the agreement to occur. There is no doubt that the catalyst for the agreement was the initial declaration that senior licensees would insist on their priority during the impending

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<sup>86</sup> Id. at 3-4.

<sup>87</sup> Id. at 9.

<sup>88</sup> The Water Act, s.33(1)(e).

shortage, unless a principled sharing agreement was reached. Under the terms of the agreement, the senior licensees agreed to take a proportionate share of the water shortage. It is impossible to isolate all of the reasons why they chose to do so, but, as with other water sharing agreements, they were used to working with the water community in the southern tributaries. In addition, they were aware that a total denial of water to junior licensees would both be unpopular in public opinion and cause a net economic loss to the region. It is also possible that they were influenced by the fact that the application of the priority principle would have denied water to the junior licence of a large food-processing plant, which provided a major market for crops grown on irrigated land in the region.<sup>89</sup>

The 2001 water sharing agreement has proved to be an important precedent. Licensees also agreed to share any shortage that might have arisen in 2002, but the return of heavy rains removed any necessity to implement the 2002 arrangement. A similar sharing arrangement was also implemented in the Belly River sub-basin in 2007.<sup>90</sup> In 2010, the Alberta Irrigation Projects Association, which represents all 13 irrigation districts in Alberta, declared that in any future water shortage, the irrigation districts would participate without charge in water sharing with the holders of lower priority licences in order to distribute sufficient water to meet human needs and livestock sustenance.<sup>91</sup>

A major feature of water sharing agreements that have come into existence in Alberta so far is that they help to meet the needs of water users during shortages, but they do not ensure that the environmental needs of the basin are addressed. The agreements do not make provision for

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<sup>89</sup> Stewart B Rood and Jenny Vandersteen, *supra*, note 49 at 1616.

<sup>90</sup> *Id.* at 1617.

<sup>91</sup> Alberta Irrigation Projects Association, Declaration re Sharing Water for Human Needs and Livestock Sustenance During Water Shortages, December 6, 2010, 1.

maintaining minimum levels of instream flow or the preservation of the aquatic environment.<sup>92</sup>

This possibility requires a much more sophisticated approach, which will be considered in the next section of this paper.

### **C. THE BOW RIVER PROJECT**

The Bow River Project represents an ambitious attempt to take water sharing agreements to an entirely new level. In the same way as the earlier agreements on the Bow River, it seeks to share the available water to meet the needs of water users but it adds the vital additional goal of protecting the health of the river throughout the basin.<sup>93</sup> It is unique because it was initially developed by major stakeholders in the Bow River, with the assistance of an expert facilitator, rather than by a government agency. In order to understand the full dimensions of the Project, it is necessary first to describe how it works and then to explore whether its goals can be achieved within the framework of the principle of priority in time.

#### **1. The Nature of the Bow River Project**

The earliest and most significant developments on the Bow River upstream of Calgary took the form of a series of hydro-electrical dams, some of which date back more than a century. In addition, the Glenmore Reservoir in Calgary is the source of the city's supply of drinking water, while also providing a measure of flood control on the Elbow River, a tributary of the Bow River.

The purpose of the Project was to examine whether the Bow River could be managed differently to achieve multiple economic, environmental and social goals throughout the basin at a modest cost. It produced a preferred scenario which involved stabilising Lower Kananaskis

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<sup>92</sup> Downstream of the Oldman River Dam and of the southern tributaries, a plan for the operation of the Dam was developed with public input. It provides that in the operation of the Dam, the prime focus must be "on the protection of the aquatic and riparian environment of the Oldman River". Stewart B Rood and Jenny Vandersteen, *supra*, note 49, 1612-1613.

<sup>93</sup> The Bow River Project, <http://www.albertawater.com/index.php/projects-research/ssrb-adaptation-project?layout=edit&id=547>, accessed October 3, 2013.

Lake and the Kananaskis River, establishing a water bank capable of managing 60,000 acre-feet of water throughout the reservoirs upstream of Calgary and raising the priority of environmental flows in the Bow River.<sup>94</sup> Changes in the operation of the upstream dams are essential to regulating the supply of water on the Bow River, but the key to understanding how the proposed Bow River Management System will meet the needs of water users and improve the health of the river system is found in the establishment of a series of Performance Measures at vital points on the river. Three of the performance measures seek to maintain the instream flow of the River at stipulated levels at critical points on the river.<sup>95</sup> A fourth measure aims to stabilise the highly regulated flow of the Kananaskis River between Lower Kananaskis Lake and Barrier Lake.

The operation of the Management System relies initially on the timing of releases from upstream dams and the from the proposed water bank. In broad principle, the Management System will work by arranging flexible releases of water from the dams and the water bank and modifications in the practices of major licensees to ensure that the agreed Performance Measures are met.

The potential working of the Management System was tested by the creation of a sophisticated Operational Model that allowed the stakeholders to make water management decisions in real time, and to observe their effect on licensees, facilities and the state of the river. The test involved a live simulation exercise in which stakeholders were asked to represent the interests of their organisations in making water use decisions while achieving the agreed performance measures. The simulation used all the climatic and hydrological evidence from the hot and dry year of 1941 to examine how stakeholders would make decisions under the much

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<sup>94</sup> Bow River Live Simulation Summary Report, Water SMART and Alberta Innovates-Energy and Environment Solutions (2010) 3, <http://www.albertawater.com/index.php/projects-research/bow-river-project>, accessed October 4, 2013.

<sup>95</sup> The three critical points are located at Calgary, below Bearspaw Dam, at the headworks of the Bow River Irrigation District and at the Bassano Dam, Id. at 5-6.

higher water demand conditions of the simulation year of 2011. The stakeholders were required to make all the required water management decisions as the various conditions that had prevailed in 1941 were revealed on a week by week basis. The decisions involved regulating the releases from upstream dams and the proposed water bank, maintaining minimum flow levels in certain bodies of water and reducing diversions by licensees at certain times. The stakeholders succeeded in making all the required decisions by unanimous agreement, without any need to resort to a panel of experts who were available to act as umpires in the event of a division of opinion.

The simulation demonstrated that it is possible to manage the Bow River so as to meet the agreed performance measures and to fulfil the needs of licensees. The management model has an important advantage over the status quo because it improves the level of instream flows throughout the Bow River Basin. It ensures that the province will have a much improved capacity to meet its water conservation objective of maintaining instream flows of the river at the level of 45% of the natural flow and to fulfil its obligation to pass 50% of the natural flow downstream to Saskatchewan<sup>96</sup> without increased reliance on other rivers in the South Saskatchewan Basin. The Bow River Project offers an enormous potential for innovative management of an important river. A subsequent study will examine how the entire South Saskatchewan River Basin can be managed in five different climate change scenarios that might occur in the next half century.<sup>97</sup>

At the present time, the Bow River Management System is entirely theoretical in nature, although the model of river flows on which it is based has now proved its value. Trans Alta

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<sup>96</sup> This obligation arises out of the Master Agreement on Apportionment, created in 1969 by the governments of Canada, Alberta, Saskatchewan and Manitoba. For further discussion, see David R Percy, Resolving Water-Use Conflicts: Insights from the Prairie Experience for the Mackenzie River Basin, C D Howe Institute, Commentary No. 341, February, 2012 at 10-11.

<sup>97</sup> The South Saskatchewan River Basin (SSRB) - Adaptation to Climate Variability Project: <http://www.albertawatersmart.com/expertise/featured-projects/south-saskatchewan-river-basin.html>.

Corporation owns the hydroelectric dams and facilities upstream of Calgary and has not yet consented to the management plan. If the plan is put into operation, it will mean that Trans-Alta will not always be able to operate its facilities so as to optimise the revenues that it receives from the production of electrical power, so it will be necessary to address at least one obvious cost in the form of lost power revenue. However, for the purposes of this study, it will be assumed that the proposed Management System, or something very like it, is likely to be applied to the heavily allocated Bow River basin in order to ensure that the needs of water users can be met, together with a much higher measure of environmental protection. The critical question is whether the priority in time principle is an obstacle to a cooperative management system of this type or whether cooperative management can be achieved within the scheme of the existing Water Act.

## **2. The Legal Place of Cooperative Management**

The legal implications of the Bow River Management Plan will depend on the structure that the major licensees and the government wish to adopt if they are to put the plan into operation. The following discussion is based on the critical assumption that Trans-Alta will join the existing agreement and that the agreement will function along the lines described in the Bow River Project and in accordance with procedures that are similar to those that were adopted in the Simulation exercise. This requires the establishment of a mechanism to communicate expected water conditions to stakeholders on a week by week basis and to allow the regulator to give the parties notice when there is a risk that the stipulated performance measures may not be achieved. As in the Simulation, stakeholders will be given an opportunity to solve collaboratively any problems that may arise in achieving the performance measures, but if they fail to do so a decision panel will be empowered to order some or all stakeholders to take certain predetermined



steps. The steps might include releases from upstream dams, releases from the water bank, requiring licensees to limit diversions or to use water from their own storage and similar actions.

Initially, it will almost certainly be desirable to operate the River under a pilot agreement for a limited period of perhaps 3 to 5 years in order to ensure that the agreement will be functional as well as durable. If the initial agreement performs well during the pilot project, it could be converted to a longer term arrangement, which is both binding but sufficiently flexible to allow for amendments to be made in the event of significant changes in environmental conditions.

These assumptions suggest that it is more appropriate, at least initially, to record the water management arrangements in a contract, rather than enshrining it in a regulatory plan or validating it by statutory amendment. The backbone of the agreement could provide that each licensee would agree to use its licensed allocation and operate its works so as to achieve the performance measures set out in the agreement. The principle of priority in time does not pose an obstacle to a contract of this nature for two reasons. First, the parties to the agreement are the major water users on the Bow River, but their operational plan must ensure that there will always be sufficient water to satisfy the allocations of all other licensees who do not participate in the agreement. This will prevent other licensees from having any legal grounds to challenge the agreement on the basis that it deprives them of their licensed allocations of water. Secondly, the contract could bind each signatory not to make a complaint to the Director about any failure to apply the priority principle, as long as all parties were following the terms of the agreement. An agreement to this effect is possible because the priority principle is not an absolute rule of law, such as the prohibition against breaking the speed limit, but a default principle that can only be activated if there is a complaint to the Director. This type of agreement that is under

consideration offers advantages to all parties and there is no reason why a promise not to file a priority complaint should not be binding. The participation of the government regulator in the contract is required to ensure that the public interest is protected. However, as the operations plan creates much improved environmental conditions on the Bow River, as well as satisfying all water users, the regulator is likely to find that it is in the public interest.

There is thus no reason why an agreement like the Bow River Management Plan cannot be put into place under the umbrella of the Water Act. It recognises that the principle of priority remains as the default rule for dealing with water shortages, but there is no overriding public policy that prevents a group of licensees from contracting that they will not initiate the enforcement of priority through a complaint to the Director as long as they also respect the allocations of other licensees. The Plan builds on the water sharing tradition that has emerged in most jurisdictions that rely on the priority principle and has the major virtue of allowing stakeholders to make initial decisions about managing their use of water to meet the challenges of operating the river in times of shortage. Their decisions are likely to be more efficient than either the application of the priority principle or the blunt instrument of regulation. The public interest is protected by the need for the regulator to approve the required performance measures and by ensuring that the agreement is sufficiently flexible to meet significant changes in environmental conditions.

In the long run, if it proves necessary to give the management plan a statutory basis, the government might wish to consider two further stages. The initial stage relies on sections 11 to 13 of the Water Act to create or amend an approved water management plan so as to enshrine a plan for dealing with shortages in certain river basins. A water management plan achieves this

statutory status when it is approved by Cabinet,<sup>98</sup> thus also ensuring a degree of political responsibility. As an approved water management plan for the South Saskatchewan River Basin already exists,<sup>99</sup> it would be necessary to rely on the statutory procedures for the amendment of the plan.<sup>100</sup> The second stage could be considered if a water sharing agreement proves its worth over the decades by meeting the challenges of drought and climate change. It might well be that experience will show that flexibility is one of the greatest virtues of a sharing agreement, but if an agreement proves its durability by passing the test of time, a change to the priority principle might be considered. In the framework of the present Act, it would be possible to envisage a system in which the normal rule requires the Director to apply the priority principle during times of shortage. However, if the provisions of an approved water management plan incorporate a water sharing agreement, the Director might be required to apply the terms of that agreement.

#### **D. CONCLUSION**

The prior allocation doctrine in Western Canada will be celebrating its 120<sup>th</sup> birthday in June, 2014. A sense of respect for the age of the principle is no reason to resist reform initiatives when they are necessary. However, it is useful to recall the history of the principle, because an immense amount of activity has been carried out under its umbrella since the very beginning of European settlement of the prairies. The history emphasizes that it is probably an understatement to point out that the reform of water law does not begin with a clean slate. The principle produced many benefits over the years, especially in the arid regions of Alberta, where it enabled massive investments in irrigated agriculture, hydroelectricity and growing cities. No one would suggest a radical reform of property law without applying a great deal of thought about the impact of reform on all the rights that have been created over a long period. Water law

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<sup>98</sup> The Water Act, S A c.W-3, s.11(2).

<sup>99</sup> <http://environment.alberta.ca/01233.html>.

<sup>100</sup> The Water Act, S A c.W-3, s.12.

is very similar. Although it does not directly create property rights, significant rights to water use have vested over the decades and must be carefully considered before contemplating the adoption of reform options that may be superficially attractive, such as the notion of reducing the allocation of existing water licences by 1% a year for 25 years.<sup>101</sup> In both water reform and home maintenance, it is important to analyze closely the precise defects before beginning repairs. In both areas, this analysis suggests renovation rather than demolition often provides the preferable solution and the demolition is only required if the underlying structure is beyond repair.

An examination of the critiques of prior allocation strongly suggests that the defects can be cured by renovation rather than demolition in a way which respects existing rights as far as possible. The main problems that have been identified related to the over-allocation of rivers to the extent that minimum levels of instream flows for environmental purposes are not met, and the possible use of the priority principle during times of shortage in a way that threatens social well-being.

The first step in addressing over-allocation is to ensure that it does not happen again. In that respect, the principle must be to ensure that licences are not issued in all river basins in a way which threatens minimum flow requirements. This requires the swift completion of the existing process to establish water conservation objectives in all major river basins and an assurance that licences will not be issued to endanger those objectives. In those parts of the South Saskatchewan basin, where existing water conservation objectives are not met, it is important to identify a plan which will achieve the objectives within a reasonable time frame. The most promising technique to enable this to occur is found in the recent trend to cooperative management in southern Alberta, and particularly in the Bow River Project.

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<sup>101</sup> Jeremy Schmidt, *supra*, footnote 48, at 51.

The distribution of water in times of shortage under the priority principle is an obvious target for criticism, but it highlights a problem which occurs more in theory than in practice. One of the benefits of the priority principle is that it sets out a clear rule that applies and does not rely on bureaucratic intervention to decide who will receive water and who will not in the event of shortages. The recent experience throughout Western North America suggests that priority is rarely applied today, but the clear rules have enabled rights holders to negotiate water sharing agreements which satisfy their needs and, especially with the participation of regulators, can ensure that environmental concerns are also addressed. As a first step, this type of cooperative basin management deserves investment and encouragement, as it offers more potential than heavy-handed regulation.

**A LEGAL AND INSTITUTIONAL ANALYSIS OF  
ALBERTA'S WATER ALLOCATION SYSTEM**

**THEME #2: TRANSFERRING WATER FROM EXISTING USES**

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## **PREFACE**

The past decade has seen an unprecedented amount of critical commentary on the law relating to Alberta's water allocation system. In 2013, Alberta Environment and Sustainable Resource Development conducted a Water Conversation with the public throughout the Province. Some of the water conversations reiterated themes found in the commentaries of the last decade.

Two themes in particular emerged from the recent discussions that are vital, because they challenge fundamental principles of the Alberta Water Act. The first is the principle of prior allocation, often described as FITFR or First in Time, First in Right. The second is an attack on how Alberta addresses the issue of transferring water allocations from existing licensees to new users.

This study deals with these important issues in two parts. This paper will discuss the methods by which water allocations can be transferred from existing licensees to new users. A companion paper discusses the principle of prior allocation.



## INTRODUCTION

The water allocation system of Western Canada contained the seeds of a major problem from the very beginning. It was effective in making initial allocations of water to encourage the growth of agriculture, the generation of hydro-electrical power and the provision of water to growing cities. But, not surprisingly for legislation drafted in 1894, it failed to consider the options available to governments once river basins approached the point of full allocation. Some critics pointed out that the 1894 legislation exacerbated this problem by granting licences that contained no expiry date. The implication of this line of criticism is that governments could have solved the problem of future shortages by granting water licences for a fixed term. If they had done so, they could have gradually accommodated new users as existing licences expired by reallocating some of the previously committed to new users. However, the debate over fixed term licences versus licences that never expired does little more than create the dilemma, now faced by every Western province, of justifying the reallocation of water taken from an existing licensee to meet the needs of new users.

The implied assumption of those who supported the idea of fixed term licences is that it is possible to make consistently rational decisions about the desirability of taking some or all of the water allocated to an existing licensee and granting it instead to a new user of water, who may apply it for the same or different purposes. There are two widely held justifications for this viewpoint. Firstly, there should be a hierarchy of water uses, which allows water to be transferred only from licensees who use water for lower priority purposes to users who wish to apply it for needs with a higher social priority. Secondly, the government should be allowed to transfer water from existing users to new users when it is in the public interest to do so. If neither of these options is adopted, the water allocation system remains frozen in time, with

water locked into the uses of those who were fortunate enough to obtain licences when water was plentiful. In this situation, the pressure to provide water to new uses still exists and systems are forced to create a safety valve to allow some transfers of water use to occur. Finally, a further option could allow existing licensees to voluntarily transfer all or part of their allocation to another licensee or to a new user, provided that public interest concerns were not affected.

Many countries around the world use one of these four options to permit water to be transferred to new users. It is a remarkable coincidence that the water law of the Western provinces of the Canada provides an illustration of each of these options. Manitoba permits the transfer of water based on a table reflecting a hierarchy of the relative importance of different uses of water. Saskatchewan allows the transfer of water based on the public interest, as determined by the government. British Columbia has created a safety valve, which allows some transfers to occur by permitting a change in the location of the land to which a water licence is attached. Since 2001, Alberta has allowed, in the southern region of the province, existing licensees to transfer their allocations voluntarily to other licensees or to new users, subject to strict scrutiny by the regulator.

This paper will consider each of these systems in turn, under the headings of preferential use, the public interest, the safety valve approach, and regulated voluntary transfers.

## **A. PREFERENTIAL USES: THE MANITOBA EXPERIENCE**

The provisions of Manitoba water law dealing with the transfer of water allocations date back to the federal Irrigation Act.

In 1919 the Prairie Provinces experienced a particularly dry year. This led federal officials to realize that there was a real possibility that the demand for water would begin to

outstrip supply. As the majority of licences, especially in arid southern Alberta, were held by irrigation districts, the fear developed that growing municipalities would be constrained by an inability to secure an adequate supply of water. In the words of the Minister of the Interior at the time, under the Irrigation Act, once “the water right is gone ... there is no provision for recovering it.”<sup>1</sup> In response, the Irrigation Act was amended in 1920 to include a list of priority of uses. It set out a hierarchy of water uses for the following purposes:

- Domestic
- Municipal
- Industrial
- Irrigation
- Other

The priority list allowed a person who required water for a purpose that ranked higher in the league table to apply for the cancellation of an existing licence for a lower ranked use and its transfer to the higher priority user. The holder of the cancelled licence was entitled to compensation. If the measure of compensation could not be agreed between the parties, the Minister was required to fix the level of compensation, based on any loss or damage sustained by the previous licensee as a consequence of cancellation.<sup>2</sup> Although the system was based on the principle of preferential use, it also contained a market element. The requirement to pay compensation meant that the person who acquired the cancelled licence must have contemplated a new use of water that was sufficiently productive to cover the costs of compensation.

Because the Act attached a water licence to the land in respect of which it was issued, it was possible to acquire a water licence by purchasing the land to which the licence was attached.

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<sup>1</sup> Canada, Parliament, House of Commons, *Debates* (17 June 1920) at 3695.

<sup>2</sup> The Irrigation Act, S.C. 1920, c.55, s.4.

However, for over 60 years, the table of preferential use provided the only method in the Prairie Provinces which permitted a water allocation to be severed from land and transferred to a new user. Each province re-enacted the table of priorities when the federal government transferred the ownership of water resources to the provinces in 1930 and it remained essentially unchanged over the decades. Saskatchewan added mineral water and mineral recovery purposes as 6<sup>th</sup> and 7<sup>th</sup> on its list of priorities<sup>3</sup> and in 1975, Alberta switched the relative positions of irrigation and industrial uses, and added water power as a 5<sup>th</sup> priority. The 1975 Alberta amendment on paper suggested that the use of water for irrigation had become “more important” than its industrial use, but there was no real debate on this issue. Indeed, it was portrayed at the time as a symbolic recognition of the importance of irrigation in the province, although in law it eliminated any possibility that irrigation water might have been transferred to industrial use.

The list of priorities remains unchanged in the Manitoba legislation. The transfer of water allocations based on the table priorities is now permitted only in places where water is fully allocated, or when the Minister determines that further allocation would negatively affect and aquatic ecosystem. In addition, if the parties are unable to agree, the measure of compensation is now set by arbitration, not by the decision of the Minister.<sup>4</sup> However, its continued existence does provide a case study for examining its utility.

Although the hierarchy of water use was established in order to ensure that municipal growth would not be constrained due to the use of water by irrigation and industry, like all similar systems, its continued existence can only be justified if it reflects societal values as to the best uses of water. The present table shows the futility of this approach. Even if the table was a perfect record of the social preferences of 1920, it surely would go longer prevail in 2013. If

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<sup>3</sup> See the last consolidation of the Saskatchewan Water Rights Act, R.S.S. 1978 c.W-8, s.15(3).

<sup>4</sup> See The Water Rights Act, C.C.S.M., c.W80, ss.9 and 14.

social preferences do change, it is necessary to go through the difficult and cumbersome process of securing an amendment to the legislation. The preferences also apply across an enormous geographical area and assume that the same water priorities apply in the mining region of Thompson, as in the rich agricultural land of the Assiniboine River basin. After the Alberta amendments of 1975, irrigation was assumed to be a higher priority use of water in both Lethbridge and Fort McMurray. Under the table of priorities, water can be transferred only upwards towards a higher priority, not vice versa, and never laterally. Hence, in Manitoba a new irrigator could not seek to cancel the licence of an industrial user, or even another irrigator, regardless of how much more efficient and productive the projected use might be. The transfer based on a hierarchy of uses does nothing to encourage increased productivity and efficient water use within each category.

Perhaps because of these deficiencies, there is no evidence that this method of transferring water allocations has been employed, except perhaps on extremely rare occasions. It can potentially apply to relieve the pressure on water supply only in the event that an important new use of water happens to fit within a high priority category.

## **B. TRANSFERS ACCORDING TO THE PUBLIC INTEREST: THE SASKATCHEWAN APPROACH**

Saskatchewan was the first prairie province to break away from allowing transfers of water allocations based on the table of priorities with the enactment of *The Water Corporation Act* in 1984 (*WCA 1984*).<sup>5</sup> The *WCA 1984* marked an important set of changes in Saskatchewan water law. The WCA transferred all of the administration of water rights from the government

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<sup>5</sup> *The Water Corporation Act*, S.S. 1983-84, c.W-4.1.

to the Saskatchewan Water Corporation and compressed the law of water rights in Saskatchewan into seven statutory sections. In addition, it made two major changes in the substantive law which are relevant to this paper. Firstly, it removed all reference to the principle of priority in time, although it may have preserved that principle in part through a provision that provided that all previous rights (including presumably their priority) remained in full force and effect until they were amended or cancelled by the Water Corporation.<sup>6</sup> Secondly, it abolished the table of priorities. As a result, it removed the only previous provision that allowed the transfer of water rights to new uses. It replaced the limited transfer provision by creating a Draconian power which allowed the Corporation to cancel any existing water right, with the approval of Cabinet, where the Corporation considered it “in the public interest to do so.” This power purported to extend even to water rights granted by the federal government prior to 1930. The holder of the cancelled right was entitled to compensation based on the residual value, at the time of cancellation, of any structures or works to secure and transport water that became redundant because through the cancellation and were surrendered to the Crown.<sup>7</sup>

In theory, this provision created an element of flexibility in Saskatchewan water law. It clearly allowed the Water Corporation to cancel any existing water right and then to reallocate the water to a new user. However, the legislation created a blunt instrument. In the absence of any rules or guidelines relating to the accommodation of new water users, the Act failed to deal with this and every other difficult issue in the administration of water rights and by default left them to be decided bureaucratically on the basis of the vague principle of the public interest.

The ill-considered WCA 1984 was so riddled with defects that further reform was inevitable. The Water Corporation was replaced by the Saskatchewan Watershed Authority in

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<sup>6</sup> Ibid, s.80(1).

<sup>7</sup> Ibid, s.42(1), (2).

2002 and an element of objectivity was introduced in the licence cancellation proceedings. If the parties were unable to agree on compensation for cancellation, the matter was to be determined by arbitration before a judge of the court of Queen's Bench of Saskatchewan.<sup>8</sup> A further restructuring occurred in 2005, with the creation of the *Water Security Agency Act*.<sup>9</sup> The 2005 Act made some changes to Saskatchewan water law, but the Agency retains the power to cancel an existing licence. This remains the only method of accommodating new users in basins that are reaching the point of full allocation.

The Saskatchewan solution to the problem of accommodating new uses of water creates, in common with the Manitoba approach, creates problems of practicality. If a person wishes to acquire a new water right in Saskatchewan, it is necessary to persuade the Cabinet to cancel an existing licence and then to seek a new licence from the Agency. In practice, this means that any transfer to a new use will be rare. The Manitoba system is slightly less cumbersome, but it still depends on convincing the relevant Minister to take the controversial action of cancelling the licence of an existing water user. These administrative rules suffer from the same defects as the original common law systems: "they do not promote the optimum use of water and are too rigid to adapt to changing societal priorities."<sup>10</sup> Especially in an era of climate change, systems of water allocation must be adaptable to changing circumstances. In practical terms, the Saskatchewan and Manitoba legislation lacks any real flexibility to deal with changing requirements in water supply.

In principle, the Saskatchewan solution appeals to many commentators because it allows the reallocation of water in the public interest. However, as Nigel Bankes has commented in the

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<sup>8</sup> The Saskatchewan Watershed Authority Act, SS 2002, c S-35.02. The arbitration provision is found in s.42 (4).

<sup>9</sup> The Water Security Agency Act, SS 2005, c W-8.1, <http://canlii.ca/t/523lk> retrieved on 2013-11-15.

<sup>10</sup> Oliver M Brandes and Linda Nowlan, "Wading into Uncertain Waters: Using Markets to Transfer Water Rights in Canada-Possibilities and Pitfalls" (2009) 19 J.E.L.P.267, 274.

context of market transfers, “government allocations will likely prove inefficient, favouring (for political reasons) low value uses, such as irrigated agriculture, rather than alternative higher value industrial and municipal uses.”<sup>11</sup> Indeed, experience shows that society benefits from enabling water to be transferred between users, often in small quantities. As the vast majority of these small transfers are not controversial and do not raise major issues of public policy, it is simply unnecessary to require a cabinet determination of the public interest before the transfer can occur.

Even when high-level decisions on water allocation have to be made, governments have had difficulty reaching objective determinations of what the public interest requires. The principle that governments can determine the best use of water was once a cornerstone of decision making on major allocations on the Canadian prairies. When the Prairie Provinces Water Board (PPWB) was established in 1948, the Board was given the power “to recommend the best use to be made of interprovincial waters in relation to the associated resources in Manitoba, Saskatchewan and Alberta and to recommend the allocation of water as between each province.”<sup>12</sup> The history of the PPWB shows the difficulty of applying in practice the superficially attractive principle of allocating water according to his best use. The PPWB be was almost immediately faced with competition between an Alberta request for the increased allocation of water to irrigation projects and a Saskatchewan request for the provision of water to what was then known as the South Saskatchewan River Project. An inability to determine which of these ideas represented the “best use” of water caused a deadlock in the PPWB and was

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<sup>11</sup> Nigel Bankes, “The Legal Framework for Acquiring Water Entitlements from Existing Users” (2006) 44 Alta. L. Rev. 323, 331.

<sup>12</sup> See Barry Barton, “The Prairie Provinces Water Board as a Model for the Mackenzie Basin,” in *Institutional Arrangements for Water Management in the Mackenzie River Basin* (Barry Sadler, ed., Calgary, University of Calgary Press, 1984) at 45.



almost responsible for “blowing up” an organization which, in many other respects, was a model of inter-jurisdictional cooperation.<sup>13</sup>

### **C. CREATING A SAFETY VALVE FOR TRANSFERS: TRANSFERS OF APPURTENANCY IN BRITISH COLUMBIA**

Water law in British Columbia has unusually deep roots. It dates back to the time of the Gold Rush when the colony’s first Chief Justice, Matthew Begbie, sought to introduce law and order by drafting the Gold Fields Act of 1859, which allowed miners to obtain a form of water rights. The legislation was influenced by earlier gold rushes in Australia, New Zealand and California. As the California Gold Rush had also been the birthplace of the American doctrine of prior appropriation, it is hardly surprising that British Columbia incorporated some of the same American doctrines as the Prairie Provinces.<sup>14</sup>

Despite its different starting points, by 1897 the scheme of British Columbia water law was in principle almost identical to that of the North-west Irrigation Act. The present day British Columbia Water Act continues to be very similar to the basic model of prairie water law. It vests in the government all water found in natural watercourses and the government has long allocated water by granting licences to water users in a manner that is almost identical to that found in the Prairie Provinces. If there is insufficient water to supply all licensees, the right to take water is determined by the principle of prior allocation in much the same way as the North-west Irrigation Act. Every licence is also required to be appurtenant to land in British Columbia.<sup>15</sup>

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<sup>13</sup> David R Percy, “Resolving Water-Use Conflicts: Insights from the Prairie Experience for the Mackenzie River Basin” Commentary No. 341, (Toronto: CD Howe Institute, 2012), 8.

<sup>14</sup> David R Percy “Water Law of the Canadian West: Influences from the Western States” in John McLaren et al, eds., *Law For The Elephant, Law For The Beaver: Essays in the Legal History of the North American West*. (Pasadena: Ninth Judicial Circuit Historical Society, 1992) 274 at 277-281.

<sup>15</sup> The Water Act, R.S.B.C. 1996 c.483, ss.2, 5, 10-12, 15.

In the same way as all the water allocation systems of the Western provinces, British Columbia faced the problem of having to respond once water rights were fully allocated. However, the Water Act does not clearly disclose the unique nature of the British Columbia solution. One section of the Act carries the promising title of “Transfer of licence, approval or permit,” but it merely states the same rule that is found in the Prairie Provinces: licences are transferred whenever there is a conveyance of the land to which the licence is appurtenant. However, the true provisions allowing for the transfer of a water right apart from the land in respect of which it was issued are found in provisions which allow a transfer of the appurtenancy. A transfer of appurtenancy requires an application to change the parcel land to which a water licence is attached.

The process for the approval of transfers of appurtenancy is highly discretionary. Applicants are required to give notice of their application in a manner directed by the Comptroller of Water rights or the regional water manager. However, the requirement of notice can be waived, if no other person's rights will be injuriously affected by the transfer. The responsible official may then transfer all or part of the rights and obligations found in the original licence from the holder to the proposed transferee, and to issue a new licence to the transferee. The official may determine the land to which the new licence will be appurtenant, provided that the land is within British Columbia.<sup>16</sup>

The transfer of appurtenancy provisions allow licensed water rights to be severed from land and to be transferred, in whole or in part, to an entirely new parcel of land. However, standing alone, a change in appurtenancy would not allow a person to put water to a different new use. This step must be accomplished by making an application to the responsible official

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<sup>16</sup> The Water Act, R.S.B.C. 1996 c.483, s.19.

who has discretion to authorize the use of water for some purpose other than that specified in the licence.<sup>17</sup> The combination of a transfer of appurtenancy and a change of use can thus allow the full transfer of a water allocation. For example, it can allow a person who holds a licence to use 100,000 acre-feet of water per year for irrigation to transfer that allocation to a person who wishes to use the same quantity of water for industrial use at an entirely different location.

Remarkably, as will be seen in the following section of this paper, in practice British Columbia allows the same type of water allocation transfers as Alberta. However, the British Columbia Act contains none of the detailed precautions set out in the Alberta Water Act. The decision whether to allow a transfer of appurtenancy and change of use is left entirely to an exercise of discretion on the part of the responsible official, without any safeguards. A technical guideline issued in 2003 provides only a suggestion on the exercise of discretion. It requires the official to make a determination that the land to which the licence will be transferred is “suitable and consistent with the purpose contained within the existing licence.”<sup>18</sup> This wording suggests that perhaps the original transfer provisions were intended to deal with a transfer from one agricultural purpose to another. It seems quite redundant if the transfer contemplates a change in the purpose of water use.

It is difficult to find any public information about the operation of the transfer of appurtenancy provisions, perhaps because the procedure is “little used”.<sup>19</sup> However, a 2005 decision of the Environmental Appeal Board in the Hotel Lake case provides a picture of how this type of transfer works and illustrates some of its major drawbacks. In that case, Sunshine

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<sup>17</sup> Ibid, s.18(1)(g). As with the transfer of appurtenancy provisions, and application for change of purpose requires notice only to those whose rights would be “injuriously affected” by the change.

<sup>18</sup> [http://www.env.gov.bc.ca/wsd/water\\_rights/policies/cabinet/appurtenancy.pdf](http://www.env.gov.bc.ca/wsd/water_rights/policies/cabinet/appurtenancy.pdf), accessed November 26, 2013.

<sup>19</sup> Oliver M. Brandes, Linda Nowlen and Katie Paris, “Going with the Flow? Evolving Water Allocations and the Potential and Limits of Water Markets in Canada” (Ottawa, Conference Board of Canada, 2008) 27.

Coast Regional District (“Sunshine Coast”) had sought the transfer of the appurtenancy of two licences held by Garden Bay Waterworks District (“Garden Bay”) that had been issued in 1946 and 1972 respectively for the diversion of 11.315 million gallons of water per year from Hotel Lake. The case posed a classic problem in the area of water transfers. For a number of years, Garden Bay had not diverted from the lake the maximum volumes of water allowed under its licence, but it retained the two licences for possible future growth and for use in the case of an emergency. The transfer would thus not increase the theoretical maximum amount of water removed from Hotel Lake by licensees, but it would result in a significant increase in the actual amount of water withdrawn. By 2005, it appeared that the waters of Hotel Lake were fully allocated, and that no new licences were likely to be issued. Nevertheless, the Assistant Regional Manager had essentially approved the transfer and had issued two conditional water licences to Sunshine Coast in substitution for the licences were originally held by Garden Bay. A number of owners of riparian land on Hotel Lake appealed the decision. The primary issue for the Environmental Appeal Board concerned the possible impact of the decision on Hotel Lake. The Board decided that prudent water management required an assessment of how much water in total could be safely withdrawn from the lake before the entire transfer could be approved. It noted that Sunshine Coast would not require the total amount of water involved in the transfer for a number of years. As a result, it required the Regional Manager to limit the amount of water that could be withdrawn under the transferred licences “to the reasonable current and immediately foreseeable” water needs of Sunshine Coast, pending an assessment of the

minimum lake levels required by Hotel Lake.<sup>20</sup> The Board thus gave only a partial approval of the licence transfers.

The Hotel Lake decision highlights the serious weaknesses of the transfer of appurtenancy provisions, which essentially allows the transfer of water rights without any significant rules to guide the exercise of discretion. It is remarkable that the Water Act allows the responsible official to dispense with the requirement to provide notice to potentially affected parties in any case, even when the new user is likely to use much more water than the previous licensee. In contrast, if Sunshine Coast had applied for a new licence, certain groups such as other licensees and riparian owners would have had an unrestricted right to file objections.<sup>21</sup> In particular, where legislation authorises the transfer of water rights, it is normal to subject the transfer application to the same scrutiny as an application for a new licence. It is also unusual to allow the approval of a transfer unless the appropriate official has determined that the transfer will not adversely affect the aquatic environment and has considered the amount of water historically diverted under the old licence.<sup>22</sup>

The British Columbia legislation thus acts as a safety valve to enable some transfers of existing water rights, but fails to include any explicit criteria against which applications for transfer must be measured.

#### **D. REGULATED VOLUNTARY TRANSFERS: THE ALBERTA EXPERIENCE**

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<sup>20</sup> Province of British Columbia, Environmental Appeal Board “*DECISION NOS. 2004-WAT-003(b) and 2004-WAT-004(b)*” (March 23, 2006) at 3. online: Province of British Columbia [http://www.eab.gov.bc.ca/water/2004wat003b\\_004b.pdf](http://www.eab.gov.bc.ca/water/2004wat003b_004b.pdf).

<sup>21</sup> The Water Act, R.S.B.C. 1996 c.483, s.11.

<sup>22</sup> These factors are explicitly mentioned in the transfer provisions of the Alberta Water Act, considered in the following section.

This account of the system which allows the voluntary transfer of water allocations in Alberta will be divided into 3 sections. The first section will provide an outline of the requirements that must be met before an application for a transfer can be granted. The second section will analyse some of the common criticisms of the legislation and supply a more detailed analysis of the transfer provisions by showing the extent to which the Water Act addresses those criticisms. The final section will provide an evaluation of the lessons that can be drawn from the first decade of transferable water allocations in Alberta.

## **1. An Outline of the Alberta Scheme**

When Alberta began its own process of water law reform in 1989, it faced, in its southern region, a greater intensity of water use and competition for water than any other jurisdiction in Canada. For nearly 70 years, the Alberta Water Resources Act had allowed transfers based on a hierarchy of water use, in much the same way as present-day Manitoba. It had the benefit of examining Saskatchewan's water law reform of 1984, but Alberta showed no appetite for the compulsory reallocation of water from existing to new users. Instead, based on the experience of Australia and some parts of the Western United States, the government chose to create a legislative structure which allowed the voluntary transfer of all or part of a licensed allocation from an existing licensee to a new user.<sup>23</sup>

As is commonly the case, the idea of transferable water allocations was controversial during the reform process. In response to public concerns, the Alberta Water Act permitted transfers only with an important political safeguard. The Act allows an application for the transfer of a water allocation only where it is authorized by either an approved water management plan or by Cabinet through an Order in Council.<sup>24</sup> As a water management plan

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<sup>23</sup> The Water Act, S.A. c. W-3, s.11(2) ("Water Act")

<sup>24</sup> Water Act, s.81(7).

must also be “approved” by the Cabinet,<sup>25</sup> the Act ensures that strong political oversight would be brought to bear before a decision could be taken to allow transfers in any region. However, after the Act was proclaimed in 1999, a succession of hot, dry summers, culminating in the severe drought of 2001, made the pressure to allow changes in water use irresistible. In 2002, the Cabinet approved the South Saskatchewan Basin Water Management Plan (“SSRB Plan”), which authorized the Director to consider applications to transfer water allocations in the regions of the province where they were most needed.<sup>26</sup>

Although the changes to the Water Act were often criticised for allowing a market in water allocations, they permit transfers to occur only in a strictly regulated environment. The philosophy of the Act is to subject applications for transfers to the same level of scrutiny as applications for new licences. The southern tributaries of the Oldman River were closed to new licence applications on an interim basis in 2002<sup>27</sup> and it has not been possible to issue new licences (with very limited exceptions) in the Bow, Oldman, and South Saskatchewan River Basins since 2007.<sup>28</sup> As a result, the transfer system provides the only method of obtaining a new water allocation in a large area of southern Alberta.

The Act requires the Director to ensure that three mandatory requirements are fulfilled before a transfer can be approved and the Director may take into account a further 7 discretionary factors in reaching a decision. The mandatory matters are directed at ensuring that the volume of water transferred does not exceed the volume of water stipulated in the original

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<sup>25</sup> Water Act, s.11(1).

<sup>26</sup> Alberta Environment, South Saskatchewan River Basin Water Management Plan, Phase One, Water Application Transfers (2002) 7. The recommendation to close the southern tributaries was adopted by the Director.

<sup>27</sup> Id. at 12.

<sup>28</sup> Under the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order*, Alta Reg 171/2007, ss. 4, 6 and 8, with minor exceptions, new licences can be issued only in respect of First Nations lands or projects, for a water conservation objective, for storage that both benefits the environment and improves the availability of water to holders of existing rights and in respect of applications that were complete before the effective date of the Regulation.

licence, that the transfer of the allocation, in the Director's opinion, does not impair the exercise of the rights of other authorized water users without their consent and that the transfer, in the Director's opinion, will not cause a significant adverse effect on the aquatic environment. In addition, the Director must consider all the matters and factors identified in the approved water management plan. The SSRB Plan lists 14 such matters and factors. Some of them repeat items dealt with in the Act, but in all cases they provide very useful guidelines to the exercise of the Director's discretion, as will be seen in the following section of this paper.

The combination of the Act and the SSRB Plan essentially require the Director to apply the principle that a transfer must result in no net harm, either to other water users or to the environment, before granting an approval to an application, in much the same way as required by modern water law in the western United States.<sup>29</sup> The application of this broad principle will also be illustrated in the next section.

The Water Act also contains a potentially useful section that allows the temporary assignment of a water allocation. It permits a water allocation to be temporarily assigned upon written agreement, without prior approval from the Director. The Director has the power to order that the diversion of water under an assignment must cease if it causes, or may cause, an adverse effect on the rights of other water users or on a water body or the aquatic environment.<sup>30</sup>

The advantage of an assignment is that allows an instant response to avert a crisis, such as the impending loss of valuable crop during hot and dry weather. Assignments played a significant role in the water sharing agreement during the 2001 drought, as shown in the first theme paper.<sup>31</sup> The assignment provision has two major limitations. It can only permit the use

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<sup>29</sup> Water Act, s. 82(3).

<sup>30</sup> The Water Act, s.33.

<sup>31</sup> David R Percy, "The Principle of Prior Allocation and Water Management in Alberta" (2013) at 26-29.



of water by a person who is an existing licensee or an existing traditional agricultural user. It does not, therefore, enable a new user to obtain water from an existing user. Secondly, the licensee or traditional agricultural user who obtains an assignment must not divert in total more water than is authorized under its existing water allocation. In effect, it allows the assignee essentially to take water under circumstances when it might otherwise be prevented from doing so under the priority system. This limitation may be unfortunate, as from a water management perspective many assignments might be acceptable as long as they did not result in an increase of the total amount diverted by both the assignor and the assignee. However, if the section is extended to cover this possibility, it will be necessary to consider restricting the duration of a temporary assignment to a single season.

## **2. Common Criticisms of Transferable Water Allocations**

The large amount of commentary on Alberta water law that has emerged over the last dozen years is often highly critical of Alberta's system of transferable water allocations. The criticisms range from a fundamental challenge to the idea of allowing any type of market-based water transfers to careful consideration of the details of the existing provisions of the Water Act. This section will consider a number of the recurring criticisms of the existing system. The conclusion to this paper will address the deeper objections to any form of market transfers.

Despite the volume of critical commentary, it is important to note that many detailed discussions support a version of the idea of market transfers of water allocations.<sup>32</sup> The

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<sup>32</sup> See, e.g., Danielle Droitsch and Barry Robinson, "Share the Water-Building a Secure Water Future for Alberta" *Water Matters and eco-justice* (2009) 25, where the authors argue for the establishment of a water allocation and share trading system that facilitates the reallocation of water from one use to another, provided that water is first secured for people and the environment. The authors recommend transfers without prior approval, where the water transferred is applied to the same use as in the original licence. The current review system should be maintained for permanent transfers of allocations between different uses. See also, *The Competition for Water: Striking a Balance among Social, Environmental and Economic Needs* (C.D. Howe Institute Commentary No.302, April 2010) 4-7.

commentary is generally directed to examining whether there are sufficient safeguards in the existing system and suggesting other ways in which the system could be improved.

Each of the main lines of criticism will be considered in turn.

**i. Intensification of Water Use**

As the discussion of the Hotel Lake case in Part C of this paper showed, many transfer systems can result in an overall increase in water use, to the detriment of a river system. The Hotel Lake case involved what some describe as a “sleeper” or a “dozer” licence. Although these are not terms of art, the licensee under a sleeper licence may not be using any of its water allocation at the time of transfer and under a dozer licence, may be using only part of its water allocation. If a person who acquires a water allocation as a result of a transfer puts all the licensed water to use, then there will be less water in the water body from which it is withdrawn. Danielle Droitsch and Barry Robinson expressed this concern when they stated that “there is a real concern that the water rights trading market will only increase the use of water as licensees sell or utilize “sleeper” licences or unused water, thus compounding the current pressures on river systems.”<sup>33</sup>

Naturally, a modern water transfer system must address this issue. In Alberta, the Water Act states that in evaluating an application for transfer, the Director may consider “the allocation of water that the licensee has historically diverted under the licence.”<sup>34</sup> As many commentators have observed, this can be a weak protection because it means that Director may, or may not, choose to take that factor into consideration. However, the same protection is reinforced by the

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<sup>33</sup> See Danielle Droitsch and Barry Robinson, *supra*, footnote 32, at 15, Julia Ko and William F. Donahue, *Allocating Our Water: Changing to Meet the Public Interest* (Water Matters, Canmore, Alberta, 2012) at 7, Jeremy Schmidt, *Alternative Water Futures in Alberta* (Parkland Institute, Edmonton, December 2011, 26.

<sup>34</sup> Water Act, s.82(4) (c) (iii).

SSRB Plan, so that it is now elevated in to a factor that the Director *must* consider. In fact, the SSRB Plan sets a clear directive for the Director’s decision that the “only net use portion of the allocation is transferable.”<sup>35</sup>

There are many ways of ensuring that water transfer systems do not allow the transfer of more water than the original licensee has ordinarily put to use. However, the commonest technique is to restrict the amount of water that can be transferred to the amount that reflects the quantity actually consumed by the original licensee. The combination of the Water Act and the SSRB Plan provides a reasonably functional assurance that this rule will be applied to transfers in Alberta.

The Alberta system of allowing voluntary transfers also provides a modest antidote to the tendency to intensify water use. In approving a transfer, the director may withhold up to 10% of an allocation of water from the licence that is being transferred in order to protect the aquatic environment or to implement a water conservation objective.<sup>36</sup> Thus, as will be seen in a later example, in a transfer for 2000 acre-feet of water, the Director is entitled to withhold 200 acre-feet for these public interest purposes. Many commentators have pointed out that the Director’s powers are discretionary, but the SSRB Plan recommends that the Director should make the 10% holdback unless there is a compelling reason to withhold less.<sup>37</sup> There is no evidence that the Director has failed to retain the holdback in any case where there was a good reason to do so.

## **ii. Windfalls**

In the debates that preceded the passage of the Water Act, and in some of the recent commentaries, it has been argued that transferable water allocations create windfalls for existing

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<sup>35</sup> Approved Water Management Plan for the South Saskatchewan River Basin (“SSRB Plan”) (Alberta Environment, August 2006) 14.

<sup>36</sup> Water Act, s.83.

<sup>37</sup> SSRB Plan, *supra*, footnote 35 at 12.

licensees. This argument has 2 branches, which relate respectively to environmental flows and social equity.

The environmental flow argument points out that existing licensees have priority over the minimum levels of flow that should be retained in a river for environmental reasons. If the government wishes to reclaim water for environmental reasons, by limiting or cancelling an existing water licence issued under the Water Act, it will be required to pay compensation to the licensee.<sup>38</sup> This means that the public is required to pay licensees to reclaim in the public interest a government owned resource which was originally granted free of charge to licensees. This conclusion is a correct interpretation of the current Water Act. However, as the discussion in the first theme paper shows,<sup>39</sup> the requirement to pay compensation in these circumstances does not arise from the legal nature of a water allocation. It is a result of a deliberate public policy choice by the Legislature as reflected in the Act.

The social equity argument is based on an objection to paying potentially “millions” of dollars<sup>40</sup> to a licensee who (or whose predecessors) obtained a water licence free of charge, many decades earlier. This argument neglects a key goal that lay behind the creation of transferable water allocations in the first place, as well as the history of resource management in Alberta. An ideal water transfer occurs if an existing licensee is able to save water by finding a way, often through technology, to use less water than before. Until it became possible to transfer the saved water, there was no incentive to invest in exploring innovative ways or in adopting technology to

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<sup>38</sup> Jason Unger, “Equity and the Water Act: First in Time, First in Right and Water Transfers Raise Questions of Public Interest” 23 News Brief No.3 (Environmental Law Centre, Edmonton, 2008) available at: [http://www.elc.ab.ca/Content\\_Files/Files/NewsBriefs/Vol.23No.3.pdf](http://www.elc.ab.ca/Content_Files/Files/NewsBriefs/Vol.23No.3.pdf), accessed November 30, 2013.

<sup>39</sup> David R Percy, *supra*, footnote 31, at 7-9.

<sup>40</sup> Jason Unger, *supra*, footnote 38.

save water.<sup>41</sup> Even if a particular transfer does not require water saving investments, it will mean at the very least that the original licensee will forego certain opportunities that existed before the transfer. For example, an original licensee who used water for irrigation purposes would no longer be able to sell land as irrigated land and would thus receive approximately one half of the price it could have been obtained prior to the transfer.<sup>42</sup> Those who are concerned with the possibility that the transfer of water allocations might create windfalls appear to neglect the fact that if transfers had remained impossible, the windfall would often remain, but in the form of the increased value of land to which water licences were attached.

Presumably if society were concerned about windfalls accruing as a result of initial grants of resources that occurred decades ago, it would have chosen to capture at least a portion of the price obtained from the sale of homestead farms, which were also provided to the original owners for a nominal price. Instead, policy seemed to recognize that if settlers expended time and effort in putting land to agricultural use, they could capture any resulting increase in value of land. The present policy of water transfers recognises similar efforts and investments that were made in putting water to valuable use. In addition, it has been pointed out that in other jurisdictions which suffer more severe water shortages than Alberta, water markets have eased an inevitable transition from certain types of irrigated agriculture by providing a nest egg for farmers wishing to leave the industry.<sup>43</sup>

### **iii. Aboriginal Interests**

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<sup>41</sup> A classic example is provided by the largest transfer yet to occur in Alberta from the Western Irrigation District to the M.D. of Rocky View, described below at 31. The transfer “price” consisted of the cost of constructing a pipeline which resulted in the saving of all the water transferred to Rocky View, leaving no windfall to the District.

<sup>42</sup> The approximate premium on the sale of irrigated land was derived from: <http://www.agcanada.com/albertafarmer/2011/01/17/good-land-is-hard-to-find/>, accessed November 30, 2013.

<sup>43</sup>Henning Bjornlund, *supra*, footnote 32 at 6.

In the many discussions of the place of Metis and First Nations' interests in Alberta water management, the main focus has been the recognition of aboriginal water rights within the provincial allocation system, as discussed in the first theme paper.<sup>44</sup> In addition, there is general agreement that contemporary reforms must not reproduce historical injustices by ignoring aboriginal claims.<sup>45</sup> The first theme paper describes some of the efforts that are being made to incorporate indigenous water rights in Alberta's prior allocation system. This paper is concerned with ensuring that the transfer of water allocations does not prejudice aboriginal rights to water. In this instance, the rules applicable to transfers accord a degree of respect that has not previously been found in Alberta water law. In considering whether to approve an application for transfer, the Director must consider the factor of First Nation Rights and Traditional Uses, because the SSRB Plan establishes this as a mandatory requirement.<sup>46</sup> The SSRB Plan sets out three factors to guide the exercise of the Director's discretion. They stipulate compliance with government consultation policies, compliance with provincial guidelines on land management and resource development and agreements with First Nations. The provisions of the SSRB Plan are certainly not a cure to aboriginal concerns about water management, but they provide a recognition of traditional uses and a reasonable assurance that the transfer of water allocations will not prejudice the rights of First Nations.

#### **iv. Functional Barriers**

Many discussions of transferable water allocations in Alberta emphasise the need to ensure that possible negative results of transfers are avoided. In broad terms, they focus on ensuring, through the approval process, that the transfer of water allocations reflects the "no net

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<sup>44</sup> David R Percy, *supra*, footnote 31, at 19-21.

<sup>45</sup> Jeremy Schmidt, *supra*, footnote 33, at 15.

<sup>46</sup> SSRB Plan, *supra*, footnote 35, at 14.

harm” principle by avoiding adverse effects on the environment or on other water users. As a result, the discussions properly focus on the safeguards required for water transfers, but at the same time they are critical of a perceived lack of activity in transfers. One study comments that “Alberta’s existing water market has not been very active. In part, this is due to the strict conditions that must be met for a transfer to be approved and because the process for approval can cause lengthy delays.”<sup>47</sup> There is thus a tension between suggesting the need for flexibility in the transfer of water allocations and the required level of protection of the public interest.

This section deals with an issue that arises in the transfer of water allocations that results from the state of licensed entitlements at the time that transfers were permitted. It relates to the problem of unused water allocations. In a series of interviews with major water users, some senior licensees reported that they did not use a percentage (which ranged from 36% to 50%) of their existing allocations and saw the unused water as security against future risk, including increased growth.<sup>48</sup> In a nutshell, when the voluntary transfer of water allocations was first permitted, some licensees already held generous licences, while others held just enough water to cover their then current use. The more generous licences in southern Alberta are often held by hydro-electric companies, municipalities or irrigation districts. Some of these organizations regard their licences as a birthright. There may be unused water in their licences, but they are reluctant to part with water for a variety of reasons. This reluctance makes it difficult for newcomers and those whose licences are just adequate to obtain water and may prevent the transfer system from becoming as active as would otherwise be the case.

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<sup>47</sup> Jeremy Schmidt, *supra*, footnote 33 at 12. See also Droitsch, In a generally critical study, Danielle Droitsch and Barry Robinson set out “three conditions that must be present for the efficient market system of resource allocation” in furthering the goal of ensuring a higher degree of water security in the form of secure rights and flexibility” *supra*, footnote 32, at 19.

<sup>48</sup> Julia Ko and William F Donahue, *supra*, footnote 23, at 10.

In considering this issue, it must first be emphasized that many allocation systems allow some types of users to hold a larger water allocation than they can immediately use. Even prior appropriation, which nominally restricts a water right to the amount that the appropriator can put to beneficial use, recognized the “growing cities doctrine.” The doctrine allows municipalities to hold unused appropriation rights to accommodate future growth without violating the general rule that prohibits holding unused water for speculation.<sup>49</sup>

As pointed out in the first theme paper, the Water Act allows a licence to be cancelled only if a licensee has failed to use any water for a three-year period. It contains no provision to deal with a situation in which a licensee has used less than its full licensed allocation over a prolonged period of time. The first step in analyzing unused water allocations is thus for the province to determine whether it is desirable to permit existing licensees to retain more water than they actually use or to allow a portion of the water that is licensed, but unused, to be reallocated through the transfer system. If there is a desire to reallocate some of the unused water, there are a variety of tools of varying degrees of intrusiveness that can be employed. At one end of the spectrum, the government could levy a small charge on each acre foot of water held under the terms of a licence. Depending on the charge, the licensee could choose to retain only the water genuinely needed for its future use and to release the remainder for possible transfer. At the other end of the spectrum, the province could limit a licensee to holding water to cover only its present needs and reasonable projections for future growth over a fixed period. The authorized volume of water under the licence could be reduced to that level and the

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<sup>49</sup> Reed D Benson, *Alive but Irrelevant: The Prior Appropriation Doctrine in Today's Western Water Law* 83 U. Colo. L. Rev. 675, 706-707 (2011-2012); Derek L Turner, “Pagosa Area Water & Sanitation District v. Trout Unlimited and an Anti-Speculation Doctrine for a New Era of Water Supply Planning,” 82 U. Colo. L. Rev. 639, 652 (2011).



remaining volume could be released. Professor Nigel Bankes has suggested a system based on this principle. It would identify the amount of unused water as of a fixed date, such as 1999, when the Water Act came into force, or June, 2002, when transfers in the South Saskatchewan Basin were first approved. The government would then remove without compensation any volume of water that was unused at the fixed date. There are many ways to deal with the water that is liberated from existing licences under this type of scheme. According to Professor Bankes' suggestion, the unused water could be added to instream licences held by the Crown. Alternatively, the unused water could be used for a combination of meeting instream flow needs and accommodating new users. Under Professor Bankes' approach, licensees would be entitled to object to such reallocation was on the basis of a variety of factors specified in the legislation.<sup>50</sup>

In between the extremes of creating an incentive by way of a water charge to make unused water available and forcibly removing the water from existing licensees, two advisory groups made other recommendations that contemplated the use of incentives and statutory changes if necessary and restricting licences to holding water for which there was a reasonable prospect of use.<sup>51</sup>

## **E. CONCLUSION**

Western Canada provides a classic case study for the exploration of policy options when it becomes clear that the natural supply of water is approaching the point of full allocation. On

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<sup>50</sup> Nigel Bankes, Policy Proposals for Reviewing Alberta's Water (Re-) Allocation System, 20 J.E.L.P. 81, 103-104 (2010).

<sup>51</sup> See on these points the Report of the Minister's Advisory Group, "Recommendations for Improving Alberta's Water Management and Allocation (2009) and the Alberta Water Council, Recommendations for Improving Alberta's Water Allocation Transfer System (2009), both summarized by Nigel Bankes, *supra*, at 100-102.

the Canadian prairies, and in many other countries, an early response to looming water shortages was to increase the natural supply of water by building dams. The dam building era in the prairie provinces stretched from the 1930s until the 1990s. As the most suitable sites for dams were used up, later dams became increasingly controversial. The depth of those controversies was emphasized by the fact the last 2 major projects, the Rafferty-Alameda Dam in Saskatchewan and the Oldman River Dam in Alberta, were the first large water developments on the prairies to be caught up in major litigation. In cases brought by environmental organisations, the Federal Court of Appeal and the Supreme Court of Canada respectively found that both projects were subject to a federal environmental assessment.<sup>52</sup> The occurrence of these cases underlined the fact that any future large-scale water storage initiatives were likely to face intense scrutiny and significant opposition.

When the dam building era was drawing to a close, attention turned to other schemes to increase the supply of water. There were ambitious calls for Alberta to consider the possibility of major inter-basin transfers, which would conduct water from the central and northern regions of the Province to the arid south,<sup>53</sup> but the economic and environmental costs of these schemes guaranteed that they were unlikely to succeed.

Once it became clear that there were few options to increase the supply of water, the importance of considering the reallocation of water from existing users to new users became urgent. This paper has shown how each of the four western provinces has adopted a different solution to this issue, but only Alberta has implemented a scheme based on the voluntary transfer

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<sup>52</sup> Canadian Wildlife Federation Inc. v. Canada (Minister of the Environment) [1989] 3 FC 309; [1989] 99 N.R.72 (F.C.A.). Friends of the Oldman River Society v. Canada (Minister of Transport), [1992] 1 SCR 3.

<sup>53</sup> A summary of the last proposal for inter-basin transfers in 1979 by Henry Kroger, the then Minister of Environment is found at: <http://albertawilderness.ca/issues/wildwater/history>, accessed December 3, 2013.

of water allocations. In evaluating the 4 systems, it is important to examine what experience can tell us about these fundamentally contrasting approaches.

First, a number of groups take issue with transferable water entitlements at a philosophical level. For a number of critics, Alberta's decision to allow water allocations to be transferred represents the "commodification" of a substance that is vital to human life.<sup>54</sup> The commodification argument sometimes goes one step further and leads to the suggestion that once a province allows water to be traded it will inevitably lead to the export of water under the North American Free Trade Agreement (NAFTA).<sup>55</sup> Both of these lines of criticism tend to ignore two important features of the Alberta Water Act. First, the transfer provisions of the Act are far from creating a "free" market in water rights. As this paper has shown, the voluntary reallocation of water allocations is subject to detailed regulations designed to safeguard the public interest in both water use and the environment.<sup>56</sup> Secondly, because the river basins of southern Alberta are fully allocated, water exports cannot occur unless water is first moved from central and northern regions into the southern basins. The Water Act prohibits anyone from transferring water between any of the major river basins, as well as forbidding the transfer of water across the international boundary. This is not the place to discuss all the relevant arguments that can arise under NAFTA, but there are strong reasons for the view that the prohibition of inter-basin transfers, without which water exports effectively cannot occur, is entirely valid on its own. The prohibition is supported by strong environmental concerns

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<sup>54</sup> By far the most celebrated proponent of this view is Maud Barlow. See for her views "Our Water Commons: Towards a New Freshwater Narrative", Council of Canadians, <http://www.canadians.org/sites/default/files/publications/water%20commons%20-%20web.pdf>, accessed December 5, 2013.

<sup>55</sup> See Maude Barlow and Tony Clark, "Who Owns Water", *The Nation*, September 2, 2002, as described in Nigel Bankes, *supra*, footnote 50 at 85.

<sup>56</sup> For example, the group Our Water is Not for Sale states 5 elements of a strong water policy: transfers should not result in a net increase in water use; water allocations should be transparent and democratic and managed by public bodies such as government; voices from aboriginal groups must be a part of decision making about water. The first 2 principles are largely met by Alberta's transfer provisions, and there has been significant improvement in the third. The group also requires that allocations be decided by a system of priority for water use and that the market should not decide who has access to water. See: <http://ourwaterisnotforsale.com/principles/>.

and the legislation does not offend the national treatment principle, because it applies equally to Canadians and Americans.

This section of the paper will deal with the opposition to transferable water allocations on pragmatic rather than philosophical grounds. Western Canada provides examples of four competing approaches to reallocating water as basins approach the point of full allocation. Unless transfers are allowed to occur, water use will be forever frozen into a rigid pattern that is dictated only the historical accident of when particular uses were first licensed. The pattern of water use will remain almost totally inflexible, regardless of the inefficiency of existing uses, a rapidly changing economy or the need to adapt to variations in climate. However, the pressure to change the use of water can sometimes not be contained. It is widely recognised that where one water transfers are tightly restricted, they tend to happen anyway, without government approval or knowledge.<sup>57</sup>

In dealing with transfers, each province has recognized that water use needs to adapt and has chosen its own solution to an inescapable problem. Although there are disagreements about philosophy, we can at least judge the merits of the different methods of allowing water transfers by the results achieved in the last decade, since Alberta first permitted voluntary transfers. It has not been possible to discover any reported transfers in Saskatchewan and Manitoba. As has been seen, some transfers have occurred in British Columbia under the transfer of appurtenancy rules, but commentators suggest that they have been few in number. As of December 1, 2013, Alberta has seen 122 transfers. It is true that the Alberta figures may include approvals of a change in a point of diversion and that other provinces may permit changes of this nature under some other mechanism. Nevertheless, it is clear that Alberta has introduced a far greater degree flexibility in water re-allocation than exists in any other western province. The Alberta system represents a huge improvement on the compulsory reallocation schemes adopted in Saskatchewan and Manitoba. Manitoba relies on a compulsory purchase system which requires ministerial approval and which, like an expropriation of land, fixes compensation through arbitration

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<sup>57</sup> Henning Bjornlund, *supra*, footnote 32 at 5.

unless the parties come to an agreement. In Saskatchewan, no transfer can be accomplished without the approval of Cabinet. In contrast, Alberta has created a practical and workable method for accommodating new users and has provided provides an incentive for all water users to reduce their existing uses by allowing them to benefit from the costs incurred in saving water.

The experience of the last decade also allows a pragmatic test of the concerns expressed by those who have a deep philosophical objection to the idea of transferable allocations. The majority of those concerns relate to whether the transfer system will lead to results that are contrary to the public interest. It is safe to draw one conclusion from the 122 transfers that have been approved in Alberta: very few of them were remotely controversial from the perspective of the public interest in water management. In fact, a great deal can be learned from the largest and most controversial transfer that was approved. In 2007, the Western Irrigation District proposed to transfer 2000 acre-feet of water from its licensed allocation to the municipal district of Rocky View in order to provide water to a proposed shopping centre and entertainment complex. The Irrigation District was to receive \$15 million for the transfer, which would be applied to convert 50 km of open canals to a pipeline, thus conserving approximately 2000 acre-feet of water. The proposed transfer was very controversial, mainly because of the land use issues involved in creating a large entertainment complex on previously undeveloped land in a small town more than 12 km north of Calgary airport. However, the proposed transaction showed some of the potential for water transfers. Despite the controversy over land use, it accommodated the needs of a new water user without any increase in the net use of water. The Irrigation District benefited from the construction of a new pipeline to replace its antiquated open canals and the Bow River regained 200 acre feet of water as a result of the Director's decision to exercise the power to hold back 10% of the water transferred for instream uses. Ultimately, the transfer was approved in September, 2007.

There is no doubt that the water transfer indirectly affected raised some important land use issues, but those had already been approved by the competent authority. It would have been difficult for any Director with the mandate of managing water to deny a water licence for a legitimate use of land solely on the grounds that it was unpopular with some segments of the public. The decision did highlight the lack of coordination between land-use decisions and water use decisions. Since that time, Alberta has enacted the Land Stewardship Act<sup>58</sup> to create a system which should lead to a considerable improvement in the coordination of decision-making over the use of land and other resources. This legislation provides a strong framework, but it is much too early to judge whether it will succeed in achieving this goal.

Alberta has created a practical and workable method for accommodating new users in a fully allocated basin. Although the process of approving applications for the transfer of water allocations can be slow and cumbersome, the Water Act also allows the many changes in water use that can occur without raising serious issues of water policy. Each of the Alberta transfers that has occurred has compensated the person who disposed of the of the water allocation, and has benefitted both the person who acquired the allocation and the environment wherever the Director exercised the right to take a 10% holdback. The Alberta experience emphasize how rarely mundane water transfers create an adverse effect on the public interest in water management, yet those day-to-day transfers simply cannot occur in the other western provinces, even if they result in a net social benefit. In any case that truly involves public interest decisions, the requirement of providing public notice of transfer applications and the public nature of transfer proceedings provide reasonable assurance that public interest concerns will be fully aired. The merits of allowing voluntary transfers of water allocation can no doubt be hotly

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<sup>58</sup> Alberta Land Stewardship Act, SA 2009, c A-26.8

debated at the philosophical level. At the practical level, the lesson is that they allow many desirable transfers to occur, while systems that rely on the hierarchy of water uses, the government application of a public interest requirement or a transfer of appurtenancy are simply too cumbersome to do so. Judged by this criterion, voluntary transfers bear some resemblance to democracy. They may not be perfect, but they do the job better than any other system.

# Water Law in Alberta

Q&A SHEET #1

## EXECUTIVE SUMMARY

In 2013, Alberta Environment and Sustainable Resource Development conducted a public, province-wide Water Conversation. Some of the conversations reiterated themes found in the commentaries of recent years.

Two themes in particular emerged from the recent discussions that are vital, because they challenge fundamental principles of the *Alberta Water Act*. The first is the principle of prior allocation, often described as FITFR or First in Time, First in Right. The second is an attack on how Alberta permits water to be transferred from existing licensees to new users.

David R. Percy, Q.C., Borden Ladner Gervais Chair of Energy Law and Policy, Faculty of Law, University of Alberta conducted a legal and institutional analysis of Alberta's water allocation system. His work was released in December 2013 in unpublished papers called:

- “Theme #1: The Principle of Prior Allocation and Water Management in Alberta”; and
- “Theme #2: Transferring Water from Existing Uses.”

To communicate with and engage the public and water stakeholders, the issues discussed in the papers have been summarized in this series of 10 *Q&A Sheets*. The first five include this executive summary and four *Q&A Sheets* about the principle of prior allocation. The second set of five examines methods by which water allocations can be transferred from existing licensees to new users. A table of contents is provided on page 4 of *Q&A Sheet #1*.

*Q&A Sheet #2* describes the elements of prior allocation in granting licences to divert and use water as they have evolved over almost 120 years.

*Q&A Sheet #3* focuses on the application of the principle of prior allocation in rationing water in times of drought and the rise of water sharing agreements to deal with water shortages.

*Q&A Sheet #4* enquires whether prior allocation is a barrier to the creation of sensible water management schemes in the province. It examines whether and to what extent prior allocation can accommodate the implementation of water management schemes developed by stakeholders. The recent Bow River Project seeks to manage one of Alberta's most important rivers in a fundamentally new way and the author investigates whether the Project can be implemented under the existing law.

*Q&A Sheet #5* briefly considers the complexity of reforming Alberta water law in the context of some of the changes that have been suggested in recent critical commentaries and in the Water Conversation.

The water allocation system of Western Canada contained the seeds of a major problem from the very beginning. It was effective in making initial allocations of water to encourage the growth of agriculture, the generation of hydro-electrical power and the provision of water to growing cities. But, not surprisingly for legislation drafted in 1894, it failed to consider the options available to governments once river basins approached the point of full allocation.

Some critics pointed out that the 1894 legislation exacerbated this problem by granting licences that contained no expiry date. The implication of this line of criticism is that governments could have solved the problem of future shortages by granting water licences for a fixed term. If they had done so, they could have gradually accommodated new users as existing licences expired by reallocating some of the previously committed to new users.

However, the debate over fixed term licences versus licences that never expired does little more than illustrate the dilemma, now faced by every Western province, of justifying the reallocation of water taken from an existing licensee to meet the needs of new users.



**M**any jurisdictions around the world use one of four options to permit water to be transferred to new users. It is a remarkable coincidence that the water law of the Western provinces in Canada provides an illustration of each of these options.

Manitoba permits the transfer of water based on a table reflecting a hierarchy of the relative importance of different uses of water.

Saskatchewan allows the transfer of water based on the public interest, as determined by the government.

British Columbia appears to have no system of allowing the transfer of water allocations. However, its legislation contains a hidden safety valve, which allows some transfers to occur by permitting a change in the location of the land to which a water licence is attached.

Since 2001, Alberta has allowed, in the southern region of the province, existing licensees to transfer their allocations voluntarily to other licensees or to new users, subject to strict scrutiny by the regulator.

*Q&A Sheet #6* considers preferential use, *Q&A Sheet #7* the public interest, *Q&A Sheet #8* the safety valve approach, and *Q&A Sheet #9* regulated voluntary transfers.

### Additional Remarks

**W**estern Canada provides a classic case study for the exploration of policy options when the natural supply of water is approaching the point of full allocation. On the Canadian Prairies, and in many other countries, an early response to looming water shortages was to increase the natural supply of water by building dams. The dam building era in the Prairie Provinces stretched from the 1930s until the 1990s. As the most suitable sites for dams were used up, later dams became increasingly controversial. The depth of those controversies was emphasized by the fact the last two major projects, the Rafferty-Alameda Dam in Saskatchewan and the Oldman River Dam in Alberta, were the first large water developments on the Prairies to be caught up in

major litigation. In cases brought by environmental organisations, the Federal Court of Appeal and the Supreme Court of Canada respectively found that both projects were subject to a federal environmental assessment.<sup>1</sup> The occurrence of these cases underlined the fact that any future large-scale water storage initiatives were likely to face intense scrutiny and significant opposition.

When the dam building era was drawing to a close, attention turned to other schemes to increase the supply of water. There were ambitious calls for Alberta to consider the possibility of major inter-basin transfers, which would conduct water from the central and northern regions of the province to the arid south,<sup>2</sup> but the economic and environmental costs of these schemes guaranteed that they were unlikely to succeed.

Once it became clear that there were few options to increase the supply of water, the importance of considering the reallocation of water from existing users to new users became urgent.

Alberta has created a practical and workable method for accommodating new users in a fully allocated basin. Although the process of approving applications for the transfer of water allocations can be slow and cumbersome, the *Water Act* also allows the many changes in water use that can occur without raising serious issues of water policy.

In the Alberta transfer system, the person who benefits from acquiring all or part of an existing allocation normally compensates the person who disposes of the allocation. In addition, the environment receives a small benefit whenever the Director exercises the discretion to take a hold back of 10 percent of the water transferred.

In practice, the Alberta experience emphasizes how rarely mundane water transfers create an adverse effect on the public interest in water management. Despite this experience, the legislation of the other western provinces prevents such day-to-day reallocations from occurring, even if they result in a net social benefit. In any case that truly involves public interest decisions, the requirement of providing

public notice of transfer applications and the public nature of transfer proceedings provide reasonable assurance that public concerns will be fully aired.

The merits of allowing voluntary transfers of water allocation can no doubt be hotly debated at the philosophical level. At the practical level, the lesson is that they allow many desirable transfers to occur, while systems that rely on the hierarchy of water uses, the government application of a public interest requirement, or a transfer of appurtenancy are simply too cumbersome to do so. Judged by this criterion, voluntary transfers bear some resemblance to

democracy. They may not be perfect, but they do the job better than any other system.

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<sup>1</sup> Canadian Wildlife Federation Inc. v. Canada (Minister of the Environment) [1989] 3 FC 309; [1989] 99 N.R.72 (F.C.A.). Friends of the Oldman River Society v. Canada (Minister of Transport), [1992] 1 SCR 3.

<sup>2</sup> A summary of the last proposal for inter-basin transfers in 1979 by Henry Kroger, the then Minister of Environment is found at: <http://albertawilderness.ca/issues/wildwater/history>, accessed December 3, 2013.

<b>WATER LAW IN ALBERTA</b> <b>A RESPONSE TO WATER CONVERSATIONS IN THE PROVINCE</b>	
<b>Theme 1: The Principle of Prior Allocation and Water Management in Alberta</b>	
<b>Q&amp;A SHEET #</b>	<b>SECTIONS</b>
1. Executive Summary	
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## THE PRINCIPLE OF PRIOR ALLOCATION

### What is the Principle of Prior Allocation?

The principle of prior allocation is often described as FITFR or First in Time, First in Right because water licences that are issued with the earliest date and time have the first right (prior) use of water. In times of water shortage, those with seniority can take their entire allocation of water before junior licence holders are entitled to take any water. It is not necessary for licensees to own riparian land (land that adjoins a watercourse) to obtain a licence. Both riparian and non-riparian land owners have equal access to the licensing system.

### What was the Early Legislation Meant to Do?

When policy-makers adopted the principle of “prior allocation” in the late 1800s, the two elements of the term were not of equal weight. “Priority” was less important than “allocation.” The focus was on securing water rights without the risk of interference by riparian owners. The dominance of the role of allocation and the secondary function of the priority principle can be traced to the very beginning of modern Western Canadian water law in 1894. The *North-west Irrigation Act* was passed in that year to address a pressing problem that arose because of the English common law that was in effect at the time. Under common law, only riparian owners had the right to divert and use surface water.

When European agricultural settlers began to arrive on the Canadian plains, the region was in the midst of a serious drought. It became clear that in many locations, farmers needed to irrigate their land in order to carry on agriculture.

Riparian rights prevented the irrigation of lands that were distant from watercourses during droughts, because only those who owned land that bordered rivers or lakes were allowed to divert water. These rights even discouraged the full development of riparian land. Under the strictest English version of the doctrine, developed in a land where water shortages were rare, riparian owners could divert water required for domestic use but they could use water for other, non-domestic purposes (such as large-scale irrigation) only if their use did not substantially diminish the ordinary flow of the river.<sup>1</sup>

*The central purpose of the 1894 Act, as described by the Minister of the Interior in introducing the legislation was “the total suppression of all riparian rights in water.”<sup>a</sup> One historical commentator stated that “the abolition of riparian rights ... was, of course, the most important point of the Act.”<sup>b</sup>*

Although the Act failed to achieve this goal completely, it ensured that those who obtained a licence from the government could use water wherever their land was located, even if it was distant from watercourses, without infringing the rights of riparian owners. The Act accomplished this purpose in two steps. First, it declared that the property in and the right to the use of all water was vested in the Crown.<sup>2</sup> Secondly, on this foundation, the government then proclaimed that no person had the right to divert and use water unless he or she obtained a licence to do so from the Crown. The only significant exception to this rule allowed the owners of riparian land to use water for statutorily designated domestic purposes without a licence.

The original legislation radically reformed property rights by removing the monopoly over the use of water that had previously been enjoyed by riparian owners. The bulk of the Act dealt with the allocation of water rights under licences to users of water, both riparian and non-riparian. The principle of priority was ancillary to this overriding purpose and was unimportant in practice in the first 90 years of the Act’s existence.

## Do Water Licences Create Property Rights?

No, water licences by their very nature do not create property rights. Here's why. A water licence will only be interpreted as creating property rights if the Act or the terms of the licence shows that the government intended to grant property rights. To determine the government's intention, the language used in the Act and the licence are examined to determine if it conveys an interest in land.

There is no sign in the Act or in the terms of licences that the government ever intended to create property rights. The *Water Resources Act*, under which licences were created before 1999, stated that a licence merely allowed the holder "to divert and use water for any or all" the purposes listed in the Act. The 1999 *Water Act* authorizes the Director to issue a licence "for the diversion of water, or the operation of a works."<sup>3</sup>

A typical licence states that the holder is authorized "to divert and use water.... subject to the terms and conditions of the licence."<sup>4</sup> Language of this type grants a licensee permission to use the Crown's water, but does not contain any suggestion that the Crown has transferred a property right to the water allocated by the licence. In simple terms, it is similar to an arrangement in which a person might grant to someone else the right to use and operate her bicycle. This arrangement cannot mean that the bicycle owner has somehow transferred her ownership interest in the bicycle to the user. She has simply granted permission for the user to take her bicycle and put it to use. For the same reasons, it can be safely concluded that licences do not grant a property interest in water.

There is a slightly less remote possibility that a water licence might be classified as a contract, under which the licensee obtains the right to divert and use water in exchange for the payment of a nominal application fee. However, neither the Act nor the terms of the licences use any language to suggest that the parties intended to create the reciprocal obligations that are central to a contract. In addition, the Act gives "no hint of a power in the designated authority

[the government] to conclude contracts."<sup>5</sup> Professor A. R. Lucas is surely correct when he states that "water licences under the statute do not convey 'contractual interests.'"<sup>6</sup>

As Professor Lucas suggests, as a matter of law water licences are surely no more than statutory or regulatory permissions<sup>7</sup> that grant the licensee the right to divert and use water, activities which would otherwise be illegal. Unlike the situation that occurs when government action deprives a person of an interest in land (where there is a presumption that compensation is payable), the government can potentially cancel or amend a water licence, provided that the legislation provides the necessary power to do so. If the government exercises this type of power, there is no presumption that the affected licensee has any right to obtain compensation, unless the legislation contains express provisions that permit compensation.

This principle is evidenced in the sections of the *Water Act* that allow the Director to suspend or cancel licences issued after 1999 in two circumstances. First, the Director can suspend or cancel a water licence without compensation if there has been a significant adverse effect on human health or public safety, which was not reasonably foreseeable at the time the licence was issued. Secondly, the same power of suspension and cancellation exists if there has been a significant adverse effect on the aquatic environment that was not reasonably foreseeable at the time the licence was issued. In the second case, the affected licence does have the right to obtain compensation, but this right exists only because the Act contains an express requirement that compensation must be paid.<sup>8</sup> In the first case, the Act does not mention the possibility of compensation and as a result, no compensation is payable. In contrast, if a water licence created property rights, there would have been a presumption that compensation was payable, unless the legislation expressly provided that there would be no compensation. In the second case, the government chose to make provision for the payment of compensation for cancellation, but it was under no legal obligation to do so.<sup>9</sup>

## When do Water Licences Expire?

**L**icences are not perpetual, even though until 1999 many water licences did not contain any reference to an expiry date. Some commentators have concluded that this meant that water licences were granted “in perpetuity.”<sup>10</sup> This characterization is both incorrect and misleading, because it carries the implication that future governments may have limited options in dealing with existing licences. **There is, however, a world of difference between granting resource rights that are perpetual and granting resource rights without an expiry date.**

In order to clearly understand the nature of the rights held under a water licence it is vital to note that water licences were never granted in perpetuity. This means as a matter of law that they can be altered more easily than many suppose, although the legal power must be exercised with a view to practical reality. The decision to grant water licences that did not expire was a deliberate choice, not a legislative oversight. Under the Act, large licences were originally granted to owners, such as railway companies, which held vast tracts of land. Most owners always intended to sell their land to settlers in irrigated parcels with a guarantee of a certain amount of water each season, so that there was some prospect that agriculture would flourish. Terminable water rights would have removed that guarantee.<sup>11</sup> In addition, despite their legal nature, those organizations that hold senior licences, which sometimes date back for over a century, and users who obtain their water under those licences, tend to regard them as perpetual. This means that although reform efforts are not subject to any legal limitations caused by the nature of licences, in practice they are likely to be met with the same level of opposition as if licences had in fact been granted in perpetuity.

If we assume, for the purpose of clarification, that water licences convey contractual rights, we must conclude that the absence of an expiry date does not mean that they are perpetual in nature. As a result, government could alter or terminate licences provided that the Act contained the

necessary express power to do so. On the other hand, if, as is likely, water licences are merely statutory permissions (rather than contractual rights) there can be no presumption that they can never be changed. However, it must be emphasized that the Legislature would have to amend the *Water Act* in order to create additional powers to make changes in existing licences. Any such amendment that affected licences granted before 1999 would be controversial in practice, but not in law, because those licences are presently immune from change under the *Water Act*.<sup>12</sup>

## Did the Crown Fail to Protect the Public Interest with Early Water Licences?

**S**enior licensees often benefitted from the allocation of large volumes of water and from a high degree of security. Their privileged position has led to many criticisms. The criticism of the shortcomings in the underlying principle of prior allocation points to three issues. One, it fails to allow the province to achieve a minimal level of environmental protection on heavily allocated rivers. Two, it does not permit the conjunctive management of surface water and groundwater; and three, it fails to protect the legitimate interests of First Nations. These are serious charges that must be addressed in considering potential reforms to the *Water Act*. These issues are addressed in *Water Law in Alberta Q&A Sheet #5*.

Some recent commentators object that the significant level of protection to senior water licences created by the Act is made worse because of the “failure [of the Crown] to protect the public interest in the granting of water licences.”<sup>13</sup> According to the commentators, this failure takes two main forms. Administrators did not discourage the excessive use of water by limiting a licensee’s allocation to the amount of water that could be put to beneficial use and by prohibiting the waste of water by licensees. In addition, they failed to meaningfully protect the environment in making decisions on granting water licences. These charges call into question the manner in which the Crown initially exercised its discretion in issuing licences and,

because the priority principle enshrines those early decisions, the commentators argue there is a strong case for reform.

These charges are seriously overstated. While it is true that the Crown's discretionary powers over the grant of early licences were lightly exercised,<sup>14</sup> the elements of beneficial use and waste were at the forefront of the licensing system. In the case of environmental protection, neither the Act nor the terms of licences entirely ignored environmental protection. The most that can be said is that the Crown strongly applied the public interest of the time, as it did with other policies designed to encourage settlement, such as allowing access to public rangelands and homesteading legislation. **Of course, the public interest today may have changed, but the Act does not prevent the implementation of new environmental goals.**

### What Happened if a Licensee Wasted Water?

**T**here was a statutory prohibition against wasting water that applied in Alberta for over a century. The Act allowed the Minister to declare a licence as forfeited in any case where the licensee had wasted water. Later versions of the Act allowed the Minister to decrease the amount of a licensed allocation in the event of waste.<sup>15</sup> This superficially attractive power was dropped from the legislation because the principle proved to be almost impossible to apply wherever the holder of a water right was actually making some use of water. History shows us that in both Canada and the US, governments and courts were simply unable to “determine what uses of water [were] acceptable.”<sup>16</sup>

American courts never found that using more water than necessary, for example, by employing flood irrigation rather than more efficient methods, amounted to waste. Similarly, losses in canal systems and storage lakes caused by leaks or excessive evaporation typically did

not constitute waste. Indeed, only flagrant examples have ever justified the diminution of a water right on grounds of waste, such as allowing water, “to run uncontrolled for twenty-four hours a day over grazing lands without an irrigation system” and without any float meters or controls of any kind.<sup>17</sup> In practice, the courts have made “many flowery pronouncements about the importance of preventing waste,” but have rarely cut back the amount of water being used.<sup>18</sup>

### Did Early Water Legislation Protect the Public Interest?

**T**he charge that there was a failure to protect the public interest in the granting of water licences is a serious one. Careful examination of the present legislation may pinpoint any defects. Probably the only way that the charge can stick is if we say that the administrators of yesteryear failed to protect the public interest of today as judged today, from the standpoint of individual commentators. In fact, history suggests that administrators were diligent in pursuing the public interest of the time, as defined by the legislation and government policy. Until the 1960s, there seemed to be a commonly held view that the major objective of government policy was to encourage the settlement of the Canadian Prairies. Policy was intended to ensure that farmers had sufficient water to enable the successful pursuit of agriculture and to permit the growth of cities and the general economy through the provision of hydro-electrical power. In the years following the Great Depression, the policy was pursued through the activities of the Prairie Farm Rehabilitation Administration. Its federal policies were intended to combat depopulation through the provision of measures to alleviate the conditions produced by severe drought. However, even at this stage, the government did apply oversight to both the volume of water granted and the conditions of its use.

## What is the Difference between FITFR and Prior Allocation?

In recent years, people have commonly referred to the principle of prior allocation as FITFR, or First in Time, First in Right. The original version of the American doctrine of prior appropriation can properly be described as a FITFR system. The acronym FITFR does not accurately describe the system in Canada, as illustrated in the chart below.

PRINCIPLE OF PRIOR ALLOCATION FIRST IN TIME, FIRST IN RIGHT (FITFR)	PRINCIPLE OF PRIOR ALLOCATION
American	Canadian
A water user may obtain a water entitlement and determine the extent of that entitlement simply by putting water to beneficial use.	The government (rather than the water user) determines the amount of water that the licensee is entitled to use. Water users (except for riparian users) have no right to take water unless the government first grants a licence.
Western American law limits the extent of the water right to the amount that can be beneficially used.  The appropriator's water use is required to be reasonable or reasonably efficient.	Canadian legislation defines the measure of a water allocation as the quantity of water fixed by the licence.  The quantity of water allocated under a licence is determined by the decision of the administrator appointed by the government.
“[b]eneficial use is perhaps the most important characteristic in defining a prior appropriation water right in the U.S.” It means that “the true measure of a water right may not be the amount of water prescribed in water right records, but only that portion which is put to beneficial use.” <sup>19</sup>	Canadian legislation does not have the tool of “beneficial use” to prevent existing licensees from holding water allocations that exceed the amount that they can beneficially use.  In Canada, government supervision was in place before any large water rights existed. Although some Canadian licences undoubtedly granted larger allocations than the licensee required, it is difficult to imagine that the government would ever have granted a licence for the types of water use that were so extreme as to violate the principle of beneficial use in the United States.
The duty of water was used in American law to calculate the amount of water that was required to allow a particular type of crop (often the crop that required the most water of those grown in a particular region) to grow to maturity.	For most licences the amount of the allocation was left to the government's discretion, but early versions of the Act specifically tried to avoid the risk that an irrigation licence might allocate more water than a project really required by adopting the concept of the duty of water.  In the Canadian Act, the Minister was empowered to define the duty of water according to locality and soil. Theoretically, this required licence allocations for irrigation purposes to be based on a duty of water that was ultimately defined as 1.5 acre-feet of water per acre of land. This rough and ready formula limited the risk that an irrigation licensee might obtain more water than could be beneficially used in a way that was not possible under prior appropriation.



## What Kind of Environmental Protection Occurred in the Early Years?

In addition to the regulatory power to limit the size of licences and to deal with wasteful practices, the legislation has always contained a number of methods of protecting the environment.

The *North-west Irrigation Act* gave Cabinet the power to protect watercourses, through a provision that allowed the regulation of the extent of diversion from rivers and other bodies of water, and the protection of sources of water supply.<sup>20</sup>

Even in the early years of administering water licences, the government inserted conditions into water licences that offered a minimal level of protection to watercourses that was impossible to achieve under the original American doctrine of prior appropriation. For example, an early grant of water to the Canadian Pacific Railway for irrigation was subject to the restriction that no diversion was allowed to reduce the flow of water at the Bassano Dam to less than 100 cubic feet per second or such higher-level as the Minister determined.<sup>21</sup> The licence granted to Calgary Power at Lake Minnewanka required the licensee to release from storage a minimum continuous flow sufficient to meet the needs of Banff National Park.<sup>22</sup> It was also common for irrigation licences to restrict the maximum rate of diversion to times when the river was at the flood stage, with correspondingly lower rates of diversion imposed when the flow of the river was at the high water and low water stages.<sup>23</sup>

The development of hydro-electrical power was also important in the early years of water development in Alberta. Water power licences were more strictly regulated than other licences. They could be granted only for a maximum term of 50 years, although they were renewable, and the government retained important flexibility in water management. For example, the licensee was required to use or store water in such a manner as not to interfere with the maximum advantageous development of the power and other resources of the river, and to comply with any orders made by the Minister in respect of the control and regulation of the flow of the waters of the river.<sup>24</sup> Some licences were subject to future changes through the incorporation of the provisions of the Dominion

Water Power Regulations that were “now or hereafter in force.”<sup>25</sup>

In common with the rest of western North America at the time, for most of its history the Act only permitted licences to be granted for consumptive uses of water and for the diversion of water, which ruled out the protection of water in its natural state.<sup>26</sup> In 1971, Alberta created a major legal innovation when it allowed licences to be granted without the requirement of a diversion or impoundment, “to use water in its natural state for the purpose of conservation, recreation or the propagation of fish and wildlife or for any like purpose.”<sup>27</sup> However, the effect of this amendment was limited in law and practice. As a matter of law, it could not protect minimum levels of instream flow in the heavily allocated river basins of southern Alberta because any natural state licence would be junior to all previously issued licences. As a matter of practice, it was interpreted very restrictively by cautious administrators. Although the Act allowed anyone to apply for and receive a natural state licence, administrators were reluctant to take advantage of this innovation. Despite receiving a number of applications, in the 28 years leading up to the proclamation of the 1999 *Water Act*, the government issued only a single natural state licence. The conservation group that applied for the licence expended an enormous effort over a long period of time in pursuing its application and required the active assistance of the Department of Forestry, Lands, and Wildlife before it was successful. Despite the fact that the legislation permitted anyone to hold a natural state licence, the Department of Environment would not allow the group to hold the licence in its own name and insisted that it was issued jointly to the group and the Government of Alberta.<sup>28</sup>

The 1999 *Water Act* made it even more difficult to obtain a natural state licence through a provision that allowed only the government to apply for and obtain such a licence.<sup>29</sup> The device, which offered such potential when it was enacted, has thus not been a successful method for protecting water in its natural state.

## Endnotes

- a. David R Percy, *Water Rights in Alberta* (1977) 15 *Alberta Law Review* at 157
- b. C S Burchill, *The Origins of Canadian Irrigation Law* (1948), 29 *Canadian Historical Review* 353, 362.
- <sup>1</sup> David R Percy, *supra* endnote a at 142, 143-144.
- <sup>2</sup> *North-west Irrigation Act*, 57-58 *Vic. c.30, s.4*, as amended in 58-59 *Vic. c.33, s.2*.
- <sup>3</sup> *The Water Resources Act*, R S A 1970, c.88, s.53(1). The 1970 *Water Resources Act* is cited as the last provincial version of the *Act* that fully reflected the principles of the original federal legislation. s.11(a); the *Water Act*, S A, 1996, c.W-3.5 s.51 (1)(b).
- <sup>4</sup> See e.g., Licence # 19647, issued 1993-11-08. The terminology used licences varied over the years, but never suggested the creation of a property interest.
- <sup>5</sup> Michael Crommelin, "The Legal Character of Petroleum Production Licences in Australia," in Terrence Daintith (ed), *The Legal Character of Petroleum Licences: A Comparative Study* (Dundee: Centre for Petroleum and Mineral Law Studies and Energy and Natural Resources Committee of the International Bar Association, 1981) 60 at 75, quoted in Alastair R Lucas, *supra*, footnote 7 at 27.
- <sup>6</sup> Alastair R Lucas, *supra*, footnote 7 at 27.
- <sup>7</sup> *Ibid* at 32.
- <sup>8</sup> *The Water Act*, S A, 1996, c.W-3.5 s.55(1)(j), s.55(2). An example of legislation that has chosen to permit the cancellation of water licences upon payment of only limited compensation in a jurisdiction that was originally governed by the federal *Irrigation Act*, see the original Saskatchewan *Water Corporation Act*, S S, 1983-84, CW-4.1, s.42(1). It allowed the cancellation of any water licence in the public interest. See now the *Water Security Agency Act*, SS 2005, c.W-8.1, s.54. In contrast to its predecessors, s.41 of this *Act* recognises the limited ability of a province to cancel a water licence issued by the federal government prior to 1930.
- <sup>9</sup> A classic example of the government's power to terminate existing rights to natural resources, including water licences, was provided by the first version of the *Alberta Land Stewardship Act*, S A 2009, c.A-26.8. Section 11 of the *Act* permitted a regional plan to cancel a natural resource right granted under any other statute, but section 19 provided that no person had a right to compensation, except in the limited circumstances prescribed in the *Act* (that dealt only with conservation directives) or under some other statute. Although these provisions were controversial, there is little doubt that they were

legally valid. Revised compensation rules were established in the *Alberta Land Stewardship Amendment Act*, S A 2011, c.9.

- <sup>10</sup> Danielle Droitsch and Barry Robinson, "Share the Water—Building a Secure Water Future for Alberta" *Water Matters and Eco-justice* (2009), 8.
- <sup>11</sup> Debates of the House of Commons, June 17, 1920, 3695.
- <sup>12</sup> *The Water Act*, S A, 1996, c.W-3.5 s.18(2).
- <sup>13</sup> Danielle Droitsch and Barry Robinson, *supra*, endnote 10.
- <sup>14</sup> David R Percy, *supra*, endnote a, at 163-4.
- <sup>15</sup> The original *Act* mentioned forfeiture for waste, *North-west Irrigation Act*, 57-58 *Vic. c.30, s.27*. The principle was fully set out in the 1898 redraft of the *Act*, *North-west Irrigation Act*, 61 *Vic. c.35, s.33*. It remained intact, with the power to amend licences in case of waste in the last consolidation of the Provincial Water Resources Act, R S A 1980, c.W-5, s.51(1)(b).
- <sup>16</sup> Danielle Droitsch and Barry Robinson, *supra*, endnote 10 at 14.
- <sup>17</sup> *New Mexico v McLean*, 308 P.2d 983 (N.M.) 1957, discussed by Janet C Neuman "Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use", 28 *Envtl. L.* 919, 937. See also the California case involving the loss of hundreds of thousands of acre-feet of water through inadequate delivery and distribution systems, discussed in David H Getches, *Water Law* (3rd.ed., 1997), 121.
- <sup>18</sup> by Janet C Neuman, "Beneficial Use, Waste, and Forfeiture: The Inefficient Search for Efficiency in Western Water Use," 28 *Envtl. L.* 919, 929.
- <sup>19</sup> Danielle Droitsch and Barry Robinson, *supra*, endnote 10 at 14.
- <sup>20</sup> *The North-west Irrigation Act*, 57-58 *Vic. c.30, ss.45, 38*.
- <sup>21</sup> Permit issued by the Department of the Interior to the Canadian Pacific Railway dated February 25, 1915.
- <sup>22</sup> Lake Minnewanka Licence, May 14, 1947, condition 2.
- <sup>23</sup> See, for example, the Permit, *supra* endnote 21. The stages of river flow were formerly defined by Regulation, as found in AR 91/58, s.15.
- <sup>24</sup> Dominion Water Power Regulations, P C 4034, October 31, 1921, *Canada Gazette*, November 12, 1921, s.45 (maximum term of 15 years), s.73 (a) (b) (maximum development of the river and regulation of flow).
- <sup>25</sup> Interlakes Final Licence, May 27, 1947. The references in this paper are to early water power

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licences, which may have been affected by a 1972 agreement with the government.

<sup>26</sup> See the 1970 consolidation of the *Water Resources Act*, R S A c.388, s.11(1)(a).

<sup>27</sup> S A 1971, c.113, s.5(c). 25

<sup>28</sup> David R Percy, “Wetlands and the Law in the Prairie Provinces of Canada” (Environmental Law Centre, Edmonton, 1993) at 82-86.

<sup>29</sup> The *Water Act*, S A 1996 c.W-3.5, s.51(2).

# Water Law in Alberta

## THE APPLICATION OF PRIOR ALLOCATION IN TIMES OF DROUGHT

### How Does the Principle of Priority in Time Work?

From its beginnings in 1894, the Canadian legislation was intended to encourage settlement by allocating secure water rights that could be exercised without the threat of interference by the owners of riparian lands. The government recognized the obvious fact that it was about to issue licences in an arid region, in which many watercourses were seasonal in nature, and that it had to confront the possibility that at times there might not be enough available water to satisfy the allocations held by all licensees. It thus adopted the principle of priority in time, which was a common feature of water law in many other countries.<sup>1</sup> The Canadian Act was strongly influenced by the American doctrine of prior appropriation.

The original legislation stated the general rule that applications for licences had precedence according to the date of filing and addressed the possibility that there might not be sufficient water to cover the requirements of all licensees. In this event, the first in time principle applied, so that a senior licensee was entitled to receive all of the water supply stipulated in its licence before a junior licensee had any claim to supply.<sup>2</sup> If a senior licensee made a complaint that another licensee was taking water in violation of the principle of priority, the Department was required to investigate and if necessary to close the works of the junior licensee to permit the senior licensee to receive its full licensed allocation.

The principle of making water available in times of shortage according to the seniority of licences is startling at first sight. It suggests that, in times of serious drought, senior licensees, such as irrigation districts, will be able to use their large allocations expansively while municipalities with junior licences are unable to assure their citizens of an uninterrupted water supply. Some municipalities with large senior licences will continue to grow, while the growth of others with junior or inadequate licences will be limited, even if this result is contrary to the principles of good planning.<sup>3</sup>

*The government recognized the obvious fact that it was about to issue licences in an arid region, in which many watercourses were seasonal in nature, and that it had to confront the possibility that at times there might not be enough available water to satisfy the allocations held by all licensees.*

It must be conceded that in theory these and other drastic consequences are possible because, as a matter of law, the principle of priority in time is the ultimate rule to be applied in times of shortage. However, a critique of the principle must take into account two realities. It must recognize that in practice it is very rare to find instances, even during serious droughts, where the priority principle has resulted in the cutting off of the supply of water to a major user. This is true both in Western Canada and, surprisingly, in recent years in the Western United States. It must also note that in recent decades, as many of the critics have observed, licensees have tended to share water shortages, rather than to insist on priority. In practice, almost universally, the priority principle has become a default rule that is applied in shortages rarely and only as the very last resort.

## Is the Priority System Fair? Can it Handle Severe Water Shortages?

A major fear of those who are critical of the priority system is that water supply to municipalities holding junior licences will be cut off in favour of senior irrigation licensees. There has never been an instance in Alberta, even during serious droughts, in which the supply of water to a major municipality has been cut off, or even involuntarily reduced. Indeed, the priority principle was rarely, if ever, applied, so as to require a licensee to close its source of supply until the early 1980s. Since that time, the principle has become relevant in two areas of the province. The arid southeast corner of Alberta contains a number of creeks in which the flow of water can be minimal in dry years or in the later months of a hot summer. The southwest corner includes the more important St. Mary, Belly, and Waterton rivers, where the effects of any drought are first felt.

The experience of dealing with water shortages in these two areas is marked by two factors. First, the application of the priority principle has not resulted in the water supply of non-agricultural uses being cut off. Secondly, in the southwest corner, when a severe drought in 2001 threatened the supply of water to towns, industry, and irrigation, the priority principle played only a supporting role. With the encouragement of the Department of Environment, most licensees arranged to share the shortage. The priority principle resulted in cutting off water supplies to approximately 25 junior licensees who refused to join the sharing scheme.

The critics correctly wonder about what will happen if 2001 is a harbinger of future droughts and question both the fairness of the priority system and its ability to handle a more severe water shortage. At the very least, the 2001 experience means that junior licensees in drought prone areas should now fully understand

the risk attached to their licences. They are able to fully utilise the licensed allocations in most years, but they can plan for the next drought by considering mitigation strategies in advance. If water is critical to the production of a highly valued crop, they can attempt to obtain a more senior allocation through the transfer system or make arrangements to receive an assignment of water licensed to another user if necessary.

It is beyond dispute that the principle of priority in time is a rarely used rule of last resort in Canada. It is more surprising that priorities are now seldom enforced in practice in the United States, especially on larger streams.<sup>4</sup> The priority principle has never been very important in practice in Canada, but in the United States, it was viewed as the lynchpin of the doctrine of prior appropriation. Certainly priorities were

*It is beyond dispute that the principle of priority in time is a rarely used rule of last resort in Canada.*

applied in the United States much more frequently than they were in Canada, even in cases when it made little sense to do so.<sup>5</sup> Today, the priority principle has little practical relevance in rationing water in the United States during times of

shortage<sup>6</sup> and it functions in much the same way as it does in Canada, as a shadow doctrine that in future will apply only as a default rule to resolve small-scale conflicts or as a worst case enforcement scenario to encourage parties to find creative ways to avoid its actual application through negotiations.<sup>7</sup> In essence, the importance of the priority principle in the United States today, “lies more in the threat of its application rather than the application” and the enforcement of priority “is more bluff than substance.”<sup>8</sup> As also occurs in Canada, those charged with enforcing priorities spend much of their time negotiating voluntary reductions, rotations, or compliance schedules with water users during times of shortage, so that often holders of senior rights agree to use less than their entitlement to assure a source of supply to junior users.<sup>9</sup>

## Why Do Holders of Senior Allocations Negotiate During Shortages?

**L**icence holders work constantly in a community of water users<sup>10</sup> and learn to understand the needs of each other. One of the side-effects of the creation of water planning devices in the Alberta *Water Act* has been the growth of bodies in which major water users spend a great deal of time discussing the management of the watercourses on which they all depend.

The two most high-profile examples of this development in Alberta have been the processes leading up to the development and continued implementation of the Saskatchewan River Basin Plan<sup>11</sup> and the Bow River Project, which are explored in *Q&A Sheet #4*. These initiatives, together with River Basin Councils and numerous other stakeholder organizations, have undoubtedly led to a much greater understanding of the reciprocal interests of water users in southern Alberta.

Any senior licensee which chose to insist on the strict application of the rules of priority during a water shortage would incur the ill-will of other water users and quite possibly be unable to count on their cooperation or backing on other water management issues.

A licensee who wishes to enforce its priority must initially make a complaint to a Director designated under the *Water Act*. The Director's powers are described in discretionary terms,<sup>12</sup> and they thus provide the Director with some leverage in dealing with the complaint. There is a history in Alberta of Directors and their predecessors actively encouraging the sharing of available supplies during shortages, most notably in the serious drought that affected southern Alberta in 2001.

## Does the Principle of Priority Threaten Water Supply to Junior Licensees?

**T**here are no cases in which major junior users of water have been cut off by the priority principle in Canada, so the

provisions of the *Water Act* have never yet been put to the legal test.

In the United States, the enforcement of priority almost always involves a court action. An American senior holder of water rights who chooses to enforce priority runs the risk that a court will examine closely the nature and strength of the water right. In a case in which the senior appropriator is seeking to shut off the supply of junior appropriators, a court might be tempted to examine in some detail the extent to which the senior appropriator is using water beneficially.

In Canada, beneficial use is not the measure of a water right, but a senior licensee still incurs some legal risk in enforcing priority. The enforcement of priority might ultimately end in court proceedings and, if it did, the court would almost certainly be required to examine all the records of the licence dating back to its original issuance.

**T**he complexity of the early Canadian legislation and the scant administrative resources available to government means that some senior licensees may have difficulty proving their entitlement to a high priority, simply because the licence documentation does not always meet the requirements of the legislation as it stood when initial water allocations were granted. An Alberta court may choose not to interfere if a Director exercised her discretion not to close off the supply of a junior licensee.

In addition, a senior licensee seeking to enforce strict priority in Alberta would face a significant political risk if its action resulted in cutting off the supply of water to a municipality or other major water user.

In Alberta, limiting water to large cities based on the priority principle would cause a political outcry. Such an outcry, combined with a general feeling of public unease about the priority principle, would be a source of great political risk. It could well convince any provincial government to enact by statute a populist change to the rules of priority. There is no doubt that this risk curbs the temptation to insist on strict priority rule.

## Should there be a Change to the Priority Principle in Alberta?

Is there any advantage in retaining a principle that is not much used and is likely to be contentious when it is used? Although for many people, the priority principle does not intuitively present the best solution for sharing water during shortages, it is probably better than the alternatives. It has the practical advantage of providing clear rules to deal with

*The observation that the principle of priority is not often applied so as to cut off the supply of water to major users creates a challenge to its continued existence.*

shortages so that all licensees know where they stand, unless a better solution can be negotiated. Licensees with a junior priority are encouraged to focus their attention on preparing for future shortages rather than hoping that an administrator will find a way to provide them with water.

In contrast, the most obvious alternatives to the priority principle are based either on treating water users equally or on allowing government to distribute water in the

public interest during times of shortage. The alternatives appeal to some commentators, but they pose obvious practical problems when it comes to their application.

In systems based on the equality of water users, such as the riparian doctrine that applies in the eastern United States, when a shortage occurs, the decision maker usually favours the prior use.<sup>13</sup> This result occurs in part because any other decision would require the removal of water previously applied by a senior user to fulfil the needs of a junior user. This type of decision is notoriously difficult to justify, except in the most strongly compelling case.

Other systems rely on the government to allocate water efficiently and equitably in times of shortage based on some notion of the public interest.<sup>14</sup> Saskatchewan enacted a variation of this approach in its original *Water Corporation Act* of 1984, in a draconian amendment which allowed the Saskatchewan Water Corporation, with the approval of Cabinet, to cancel any existing water licence if it considered it to be in the public interest. The holder of the cancelled licence was entitled to compensation based on the residual value of the any works that were used to secure and transport water and that were made redundant by the cancellation.<sup>15</sup>

Some commentators endorse the creation of a power to alter water allocations in the public interest. It prevents, for example, the danger that water required by municipalities might not be available because of an irrigation licence that holds a senior priority. However, even in this case, the public interest test does not necessarily suggest that the municipality should receive the available water. A very close examination would be required before this determination could be made. Some “municipal” uses of water can be very wasteful, for example when they involve irrigating golf courses or operating car washes. Other municipalities have per capita consumption rates that are double those of their neighbours, or pricing structures that encourage excessive consumption. It is certainly not obvious that all municipal uses should take precedence and making water use decisions by applying a public interest test involves micromanagement at a time when swift decision-making is needed. It is extraordinarily difficult in practice to determine whether one use of water is more important than another, and many prefer the clear application of the rules of priority to leaving the *ad hoc* determination of who gets water and who does not to government staff.<sup>16</sup>

*Although for many people, the priority principle does not intuitively present the best solution for sharing water during shortages, it is probably better than the alternatives. It has the practical advantage of providing clear rules to deal with shortages so that all licensees know where they stand, unless a better solution can be negotiated.*

## What Water Sharing Agreements Have Emerged Since the 1990s?

### The 1990s

Water sharing agreements emerged during a series of hot and dry summers in the 1990s. They initially existed between irrigation districts situated on the Bow River. The districts agreed to draw down their stored water at agreed rates and thus to reduce their diversions from the river during the period of draw-down. These actions allowed more water to flow to the downstream districts and ensured that they could meet their immediate needs. The districts also agreed to refill their storage facilities in a coordinated fashion, so that they were all able to make use of the available stream flow and to ensure that their diversions complied with the terms of their respective licences. The initial agreements were extended in later years to ensure that holders of junior licences, which received their water supply through the works of an irrigation district, were able to receive a continuous supply of water when they might otherwise have been cut off under the priority principle. Under these agreements, each licensee agreed to divert less than its full licensed allocation to allow junior licensees, which included at least one municipality, to receive their full entitlements. These arrangements were essentially precursors to the assignments of water allocations that were created under the 1999 *Water Act* (see *Q&A Sheet #4*).

*On the Bow River, these initially unofficial arrangements have now been replaced by collaborative discussions between the major licensees and government agencies during the period when most irrigation diversions occur.*

### The 2000s

In 2001, a severe drought put to the test the ability of sharing agreements to cope with a serious water shortage. A lack of winter precipitation and a series of hot, dry summers meant that storage reservoirs on the southern tributaries of the Oldman River were drawn down to historically low levels in late 2000.<sup>17</sup> This chain of events inspired a series of meetings in 2000 to prepare for the possibility of water shortages in 2001. By May 2001 it was clear that there would be insufficient water to supply all licensees on the southern tributaries with their licensed allotments. In the face of impending shortages, the senior licensees on the system gave notice that they expected priorities to be strictly enforced during the drought, but they also signalled their willingness to share the threatened shortage.<sup>18</sup> Water supply forecasts indicated that if the priority principle were applied, 336 licensees with a priority dating after May 1950 would not receive their allocations of water.

A Basin Advisory Committee provided a draft water sharing agreement on May 9, 2001, based on the principle that all signatories must agree to share their licensed allocations and priorities. All water users in the basin were given the opportunity to join the sharing agreement.

Ultimately, the Advisory Committee determined that farmers within irrigation districts would be restricted to using between 8.6 and 11.3 inches of water per acre (the figure varied because of the different efficiencies of each district) and all non-irrigation users would be limited to using 60 percent of their licensed allocations. Approximately 650 licensees joined the sharing agreement. One small irrigation district withdrew from the agreement and chose to rely on its senior 1923 licence for water supply throughout 2001. A second irrigator did not sign the sharing agreement, but respected its terms.<sup>19</sup> Some licensees who did not sign the agreement entered their own water sharing agreements and the priority principle was applied to shut off the supply of water to 63 non-participating holders of junior licences.

After the sharing agreement came into force, Alberta Environment carried out intensive inspections to ensure that its terms were being respected by water users. They noted that most of the 63 licensees against whom priority had been enforced had projects that were either inoperable or not being used in 2001.<sup>20</sup>

The sharing agreement was implemented through assignments of water under section 33



of the *Water Act*. This useful, but limited, section allows a licensee to temporarily assign all or part of its unused allocation to another licensee by written agreement. An assignment can be executed quickly because there is no requirement of advance administrative approval and it can be implemented immediately, provided that there are no adverse effects on a water body or on the aquatic environment.<sup>21</sup> Under this scheme, senior licensees were able to assign to junior licensees, who may not otherwise have received any water sufficient to allow the junior licensee to use 60 percent of its normal allocation.

The sharing agreement was successful in enabling water users to survive a drought in which the basin received only half of its median annual flow. It required not only flexibility on the part of senior licensees, but also the active participation of the regulator in order to ensure that its terms were implemented in time to avoid a midsummer crisis. Clearly, the sharing agreement avoided the application of the strict priority principle, but the principle of priority also enabled the agreement to occur. There is no doubt that the catalyst for the agreement was the initial declaration that senior licensees would insist on their priority during the impending shortage, unless a principled sharing agreement was reached. Under the terms of the agreement, the senior licensees agreed to take a proportionate share of the water shortage. It is impossible to isolate all of the reasons why they chose to do so, but, as with other water sharing agreements, they were used to working with the water community in the southern tributaries. In addition, they were aware that a total denial of

water to junior licensees would both be unpopular in public opinion and cause a net economic loss to the region. It is also possible that they were influenced by the fact that the application of the priority principle would have denied water to the junior licence of a large food-processing plant, which provided a major market for crops grown on irrigated land in the region.<sup>22</sup>

The 2001 water sharing agreement has proved to be an important precedent. Licensees also agreed to share any shortage that might have arisen in 2002, but the return of heavy rains removed any necessity to implement the 2002 arrangement. A similar sharing arrangement was also implemented in the Belly River sub-basin in 2007.<sup>23</sup> In 2010, the Alberta Irrigation Projects Association, which represents all 13 irrigation districts in Alberta, declared that in any future water shortage, the irrigation districts would participate without charge in water sharing with

the holders of lower priority licences so that sufficient water could be distributed to meet human needs and livestock sustenance.<sup>24</sup>

A major feature of water sharing agreements that have come into existence in

Alberta so far is that they help to meet the needs of water users during shortages, but they do not ensure that the environmental needs of the basin are addressed. The agreements do not make provision for maintaining minimum levels of instream flow or the preservation of the aquatic environment.<sup>25</sup> This possibility requires a much more sophisticated approach, which is considered in *Q&A Sheet #4*.

*Clearly, the sharing agreement avoided the application of the strict priority principle, but the principle of priority also enabled the agreement to occur.*

## Endnotes

<sup>1</sup> Stewart B Rood and Jenny Vandersteen, *Relaxing the Principle of Prior Appropriation: Stored Water and Sharing the Shortage in Alberta, Canada*, 24 *Water Resource Management* 1605, 1606 (2010).

<sup>2</sup> These rules were stipulated in the 1898 redraft of the *North-west Irrigation Act*, 61 *Vic. c.35, ss.8 and 25*. The original 1894 Act, which reflected the views of its framer, William Pearce, allocated water during times of shortage according to the purpose of the licence, as well as its date. *North-west Irrigation Act*, 57-58 *Vic. c.30, s.8 and 19*. It is almost certain that the original provisions were never applied because very few, if any, licences had been issued at that time and wet conditions prevailed for almost a decade after the 1894 Act was passed.

<sup>3</sup> Danielle Droitsch and Barry Robinson, “Share the Water-Building a Secure Water Future for Alberta” *Water Matters and eco-justice* (2009), 18. .

<sup>4</sup> A Dan Tarlock, *Prior Appropriation: Rule, Principle, Or Rhetoric?* 76 *N D L Rev.*881, 883 (2000).

<sup>5</sup> David H Getches, *Water Law* (3rd.ed., 1997) 101, 103-104.

[it’s actually *supra*, footnote 28]

<sup>6</sup> Reed D Benson, *Alive, but Irrelevant: The Prior Appropriation Doctrine in Today's Western Water Law*, 83 *U. Colo. Law Rev.*675, 678 (2012).

<sup>7</sup> A Dan Tarlock, *supra*, endnote 35, at 883. [footnote 35 doesn’t match up]

<sup>8</sup> *Id.*

<sup>9</sup> A Dan Tarlock, *The Future of Prior Appropriation in the New West*, 41 *Nat. Res. Jl.* 770, 778.

<sup>10</sup> A Dan Tarlock, *supra*, endnote 35, 897. [ which Tarlock – 4 or 9?]

<sup>11</sup> *Approved Water Management Plan for the South Saskatchewan River Basin (Alberta) 2006*. Available online at:

[http://environment.alberta.ca/documents/SSrb\\_Plan\\_Phase2.pdf](http://environment.alberta.ca/documents/SSrb_Plan_Phase2.pdf). 37

<sup>12</sup> *The Water Act*, S A c.W-5, s.32.

<sup>13</sup> A Dan Tarlock, *supra*, endnote 35, 899. [which Tarlock?]

<sup>14</sup> A Dan Tarlock, *ibid* at endnote 34, quotes a recommendation from the Water Law Committee of the American Society of Civil Engineers as follows: “The State, in the exercise of its sovereign police power to protect the public interest in the waters of the State, undertakes to provide, through this Code, and orderly strategy to allocate available water efficiently and equitably in times of water shortage or water emergency.” [which Tarlock?]

<sup>15</sup> *The Water Corporation Act*, SS.1983-1984, c.W-41, s.42. This Act underwent major amendments in 1997, 2002 and 2005, when it was replaced by the *The Water Security Agency Act*, SS 2005, cW-8.1. The provisions allowing the cancellation of licences are now found in s.54 of the 2005 Act.

<sup>16</sup> James L. Huffman, *Clear the Air* 21 *Envtl. Law* 2253, 2256 (1991). For the classic account of the problems of determining water issues by reference to the relative importance of different uses of water, see Frank J Trelease, *Model Water Code, the Wise Administrator and the Goddam Bureaucrat*, 14 *Nat. Resources J.*207-29 (1974).

<sup>17</sup> Stewart B. Rood and Jenny Vandersteen, *Relaxing at the Principle of Prior Appropriation: Stored Water and Sharing the Shortage in Alberta, Canada*, 24 *Water Resources Management* 1605, 1615 (2010).

<sup>18</sup> Alberta Environment, Regional Service: Regional Water Administration Branch, 2001 *Water Administration Summary Report, Southern Tributaries: St. Mary-Belly-Waterton Rivers*,16-20.

<sup>19</sup> *Id.* at 3-4.

<sup>20</sup> *Id.* at 9.

<sup>21</sup> *The Water Act*, s.33(1)(e).

<sup>22</sup> Stewart B Rood and Jenny Vandersteen, *supra*, note 49 at 1616.

<sup>23</sup> *Id.* at 1617.

<sup>24</sup> Alberta Irrigation Projects Association, *Declaration re Sharing Water for Human Needs and Livestock Sustenance During Water Shortages*, December 6, 2010, 1.

<sup>25</sup> *Downstream of the Oldman River Dam and of the southern tributaries, a plan for the operation of the Dam was developed with public input. It provides that in the operation of the Dam, the prime focus must be “on the protection of the aquatic and riparian environment of the Oldman River.”* Stewart B Rood and Jenny Vandersteen, *supra*, note 49, 1612-1613.

## CAN THE PRIOR ALLOCATION SYSTEM ACCOMMODATE NEW APPROACHES TO WATER MANAGEMENT?

### How Would the Bow River Project Apply Water Sharing Agreements?

**T**he Bow River Project represents an ambitious attempt to take water sharing agreements to an entirely new level. In the same way as the earlier agreements on the Bow River, it seeks to share the available water to meet the needs of water users, but it adds the vital additional goal of protecting the health of the river throughout the basin.<sup>1</sup>

The Project is unique because it was initially developed by major stakeholders in the Bow

River, with the assistance of an expert facilitator, rather than by a government agency.

*The Bow River Management Plan adds the vital additional goal of protecting the health of the river throughout the basin.*

### What is the Proposed Bow River Management System?

**T**he earliest and most significant developments on the Bow River upstream of Calgary took the form of a series of hydro-electrical dams, some of which date back more than a century. In addition, the Glenmore Reservoir in Calgary is the source of the city's supply of drinking water, while also providing a measure of flood control on the Elbow River, a tributary of the Bow River.

The purpose of the Project was to examine whether the Bow River could be managed differently to achieve multiple economic, environmental, and social goals throughout the basin at a modest cost. It produced a preferred scenario

which involved stabilizing Lower Kananaskis Lake and the Kananaskis River, establishing a water bank capable of managing 60,000 acre-feet of water throughout the reservoirs upstream of Calgary, and raising the priority of environmental flows in the Bow River.<sup>2</sup>

Changes in the operation of the upstream dams are essential to regulating the supply of water on the Bow River, but the key to understanding how the proposed Bow River Management System will meet the needs of water users and improve the health of the river system is found in the establishment of a series of performance measures at vital locations on the river. Three of the performance measures seek

to maintain the instream flow of the river at stipulated levels at critical points on the river.<sup>3</sup> A fourth measure aims to stabilize the highly regulated flow of the Kananaskis River between Lower Kananaskis Lake and Barrier Lake.

The operation of the management system relies initially on the timing of releases from upstream dams and from the proposed water bank. In broad principle, the management system will work by arranging flexible releases of water from the dams and the water bank, and modifications in the practices of major licensees to ensure that the agreed-upon performance measures are met.

## How was the Proposed Management System Tested?

A sophisticated operational model allowed stakeholders to make water management decisions in real time, and to observe their effect on licensees, facilities, and the state of the river. The test involved a live simulation exercise in which stakeholders were asked to represent the interests of their organizations in making water use decisions while achieving the agreed-upon performance measures. The simulation used all the climatic and hydrological evidence from the hot and dry year of 1941 to examine how stakeholders would make decisions under the much higher water demand conditions of the simulation year of 2011. The stakeholders were required to make all the required water management decisions as the various conditions that had prevailed in 1941 were revealed on a week-by-week basis. The decisions involved regulating the releases from upstream dams and the proposed water bank, maintaining minimum flow levels in certain bodies of water, and reducing diversions by licensees at certain times. The stakeholders succeeded in making all the required decisions by unanimous agreement, without any need to resort to a panel of experts who were available to act as umpires in the event of a division of opinion.

## What did the Modelling Show?

The simulation demonstrated that it is possible to manage the Bow River so as to meet the agreed-upon performance measures and to fulfil the

needs of licensees. The management model has an important advantage over the status quo because it improves the level of instream flows throughout the Bow River Basin. It ensures that the province will have a much improved capacity to meet its water conservation objective of maintaining instream flows of the river at the level of 45 percent of the natural flow and to fulfil its obligation to pass 50 percent of the natural flow downstream to Saskatchewan<sup>4</sup> without increased reliance on other rivers in the South Saskatchewan River Basin. The Bow River Project offers an enormous potential for innovative management of an important river. A subsequent study will examine how the entire South Saskatchewan River Basin can be managed in five different climate change scenarios that might occur in the next half century.<sup>5</sup>

## Will the Management System be Implemented?

At the present time, the Bow River Management System is entirely theoretical in nature, although the model of river flows on which it is based has now proved its value. TransAlta Corporation owns the hydro-electric dams and facilities upstream of Calgary and has not yet consented to the management plan. If the plan is put into operation, it will mean that TransAlta will not always be able to operate its facilities so as to optimize the revenues that it receives from the production of electrical power, so it will be necessary to address at least one obvious cost in the form of lost power revenue.

*The Bow River Project offers an enormous potential for innovative management of an important river.*

## What are the Legal Implications of the Bow River Management Plan?

*An agreement to this effect is possible because the priority principle is not an absolute rule of law, such as the prohibition against breaking the speed limit, but a default principle that can only be activated if there is a complaint to the Director.*

What are the legal implications if the proposed management system, or something very like it, is to be applied to the heavily allocated Bow River Basin? The

management plan has the challenging goal to ensure that the needs of water users can be met, together with a much higher measure of environmental protection than presently exists. The critical question is whether the priority in time principle is an obstacle to a cooperative management system of this type or whether cooperative management can be achieved within the scheme of the existing *Water Act*.

The legal implications of the Bow River Management Plan will depend on the structure that the major licensees and the government wish to adopt if they are to put the plan into operation. The following discussion is based on the critical assumption that TransAlta will join the existing agreement and that the agreement will function along the lines described in the Bow River Project and in accordance with procedures that are similar to those that were adopted in the simulation exercise. This requires the establishment of a mechanism to communicate expected water conditions to stakeholders on a week-by-week basis and to allow the regulator to give the parties notice when there is a risk that the stipulated performance measures may not be achieved. As in the simulation, stakeholders will be given an opportunity to solve collaboratively any problems that may arise in achieving the performance measures, but if they fail to do so, a decision panel will be empowered to order some or all stakeholders to take certain predetermined steps. The steps might include releases from upstream dams, releases from the water bank, requiring licensees to limit diversions or to use water from their own storage, and similar actions.

Initially, it will almost certainly be desirable to operate the river under a pilot agreement for a limited period of perhaps three to five years in order to ensure that the agreement will be functional as well as durable. If the initial agreement performs well during the pilot project, it could be converted to a longer term arrangement, which is both binding and sufficiently flexible to allow for amendments to be made in the event of significant changes in environmental conditions.

These assumptions suggest that it is more appropriate, at least initially, to record the water management arrangements in a contract, rather than enshrining them in a regulatory plan or validating them by statutory amendment. The backbone of the contract could provide that each licensee would agree to use its licensed allocation and operate its works so as to achieve the performance measures set out in the agreement.

The principle of priority in time does not pose an obstacle to a contract of this nature for two reasons. First, the parties to the agreement are the major water users on the Bow River, but their operational plan must ensure that there will always be sufficient water to satisfy the allocations of all other licensees who do not participate in the agreement. This will prevent other licensees from having any legal grounds to challenge the agreement on the basis that it deprives them of their licensed allocations of water. Secondly, the contract could bind each signatory not to make a complaint to the Director about any failure to apply the priority principle, as long as all parties were following the terms of the agreement. An agreement to this effect is possible because the priority principle is not an absolute rule of law, such as the prohibition against breaking the speed limit, but a default principle that can only be activated if there is a complaint to the Director. This type of agreement that is under consideration offers advantages to all parties and there is no reason why a promise not to file a priority complaint should not be binding. The participation of the government regulator in the contract is required

to ensure that the public interest is protected. However, as the operations plan not only creates much improved environmental conditions on the Bow River, but also satisfies all water users, the regulator is likely to find that the plan is in the public interest.

There is thus no reason why an agreement like the Bow River Management Plan cannot be put into place under the umbrella of the *Water Act*. It recognizes that the principle of priority remains as the default rule for dealing with water shortages, but there is no overriding public policy that prevents a group of licensees from contracting that they will not initiate the enforcement of priority through a complaint to the Director as long as they also respect the allocations of other licensees. The Plan builds on the water sharing tradition that has emerged in most jurisdictions that rely on the priority principle and has the major virtue of allowing stakeholders to make initial decisions about managing their use of water to meet the challenges of operating the river in times of shortage. Their decisions are likely to be more efficient than either the application of the priority principle or the blunt instrument of regulation. The public interest is protected by the need for the regulator to approve the required performance measures and by ensuring that the agreement is sufficiently flexible to meet significant changes in environmental conditions.

In the long run, if it proves necessary to give the management plan a statutory basis, the

government might wish to consider two further stages. The initial stage relies on sections 11 to 13 of the *Water Act* to create or amend an approved water management plan so as to enshrine a plan for dealing with shortages in certain river basins. A water management plan achieves this statutory status when it is approved by Cabinet,<sup>6</sup> thus also ensuring a degree of political responsibility. As an approved water management plan for the South Saskatchewan River Basin already exists,<sup>7</sup> it would be necessary to rely on the statutory procedures for the amendment of the plan.<sup>8</sup> The second stage could be considered if a water sharing agreement proves its worth over the decades by meeting the challenges of drought and climate change. It might well be that experience will show that flexibility is one of the greatest virtues of a sharing agreement, but if an agreement proves its durability by passing the test of time, a change to the priority principle might be considered. In the framework of the present act, it would be possible to envisage a system in which the normal rule requires the Director to apply the priority principle during times of shortage. However, if the provisions of an approved water management plan incorporate a water sharing agreement, the Director might be required to apply the terms of that agreement rather than priority. In effect, priority would be a default rule to be applied only in the absence of an approved water sharing agreement.

*The Plan. . .has the major virtue of allowing stakeholders to make initial decisions about managing their use of water to meet the challenges of operating the river in times of shortage.*

*Their decisions are likely to be more efficient than either the application of the priority principle or the blunt instrument of regulation.*

## Endnotes

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<sup>1</sup> The Bow River Project, <http://www.albertawater.com/index.php/projects-research/ssrb-adaptation-project?layout=edit&id=547>, accessed October 3, 2013.

<sup>2</sup> Bow River Live Simulation Summary Report, Water SMART and Alberta Innovates-Energy and Environment Solutions (2010) 3, <http://www.albertawater.com/index.php/projects-research/bow-river-project>, accessed October 4, 2013.

<sup>3</sup> The three critical points are located at Calgary below Bearspaw Dam, at the headworks of the Bow River Irrigation District, and at the Bassano Dam, *Id.* at 5-6.

<sup>4</sup> This obligation arises out of the Master Agreement on Apportionment, created in 1969 by the governments of Canada, Alberta, Saskatchewan, and Manitoba. For further discussion, see David R Percy, *Resolving Water-Use Conflicts: Insights from the Prairie Experience for the Mackenzie River Basin*, C D Howe Institute, Commentary No. 341, February, 2012 at 10-11.

<sup>5</sup> The South Saskatchewan River Basin (SSRB) — Adaptation to Climate Variability Project: <http://www.albertawatersmart.com/expertise/featured-projects/south-saskatchewan-river-basin.html>.

<sup>6</sup> The *Water Act*, S A c.W-3, s.11(2).

<sup>7</sup> Approved Water Management Plan for the South Saskatchewan River Basin, <http://esrd.alberta.ca/water/programs-and-services/river-management-frameworks/south-saskatchewan-river-basin-approved-water-management-plan/documents/SSRB-ApprovedWaterManagementPlan-2006.pdf>

<sup>8</sup> The *Water Act*, S A c.W-3, s.12.

# Water Law in Alberta

## DOES THE CURRENT WATER ACT ADEQUATELY PROVIDE FOR THE HEALTH OF RIVERS AND BASINS?

### Are Changes to the *Water Act* Necessary to Protect Instream Flow Needs?

**W**ater allocation decisions are a two-step process. The first step requires a determination of the minimum flow that is required to protect the health of the aquatic and riparian environment of a river system. The second step involves allocating the right to divert and use only the quantity of water that exceeds the instream flow needs of the river basin.

It is much easier to implement the two-step process in river basins in which few licensed allocations have been made. It is much more difficult in basins, like the South Saskatchewan River Basin, where licences already authorize the use of water to the extent that it is difficult or impossible to maintain the desired levels of instream flow.

In Alberta, the statutory device of a water conservation objective is used to formulate minimum levels of desired instream flow.<sup>1</sup>

The general water conservation objective for the South Saskatchewan Basin has been set at 45 percent of the natural rate of flow. However, because licences have been issued for amounts of water that far exceed 45 percent of the natural flow of the river, the present law puts the health of the river in the position of the most junior licence in years of low flow.<sup>2</sup>

The law allows licensees to receive their full allocations, leaving ecological needs to be satisfied with whatever river flow remains. As Henning Bjorlund has pointed out, this undermines the protection of natural water bodies. If a basic level of environmental protection is to be achieved, the water

conservation objective should be satisfied before licensees can withdraw any water.<sup>3</sup>

Many commentators ascribe these results to the failure of the priority principle and conclude that “Albertans are stuck with a system that provides few opportunities to preserve river health.”<sup>4</sup> If this is the case, then there is a strong argument for fundamental reform of the *Water Act*.

However, these criticisms confuse the prior allocation principle with some particular rules that are found in the Alberta Act. For example, the decisions to protect existing water licences and to grant compensation if the Director

suspends or cancels a new licence because of a significant adverse effect on the aquatic environment, were not compelled by the priority principle. Instead, they were the result of deliberate

policy choices.

**Prior allocation is a method of distributing the available water to individual users. There is nothing to stop a government from establishing how much water is available for allocation.** If the government decides that 55 percent of the natural flow of the river can be allocated, or that licensees can divert water only if a designated level of instream flow is maintained, it can pass an amendment to the Act with that effect. The distribution of the remaining water is then left to the priority principle.

*The law allows licensees to receive their full allocations, leaving ecological needs to be satisfied with whatever river flow remains.*



Most commentators assume that in heavily allocated rivers, this solution would require the government to pay licensees significant amounts of money to reassert control over a public resource.<sup>5</sup> However, there is nothing in the principle of prior allocation that requires this result.

It is a basic legal principle that the government has a duty to compensate a person only if legislation extinguishes a property right. A water licence is a statutory permission, not a property right. Even if a licence did create a property right, a rule that allows a licensee to divert water only in certain conditions would not create a right of compensation because it limits, but does not extinguish, the rights of the licensee.

It is always difficult to achieve the protection of minimum levels of instream flows in fully allocated rivers. In Alberta, if the government wishes to do so, it would need to amend some specific rules of the *Water Act*, but its actions would not be incompatible with the principle of prior allocation.

### Are Changes to the *Water Act* Necessary to Allow for Conjunctive Management of Surface Water and Groundwater?

In 1962, Alberta became a leader in North America when it brought groundwater under the *Water Resources Act*.<sup>6</sup> As a result of this change, all new users of groundwater for other than domestic purposes were required to obtain a licence, together with existing users who were given a period of grace, (which ultimately extended until 1978) to bring their uses under the provisions of the Act. **It is thus simply incorrect to state that Alberta's allocation system treats surface water as distinct from groundwater.** This has been emphasized with absolute clarity since 1981, when the Act was amended to read that it applied to "all water on or under the surface of the ground."<sup>7</sup>

The inclusion of groundwater in the *Water Act* does not mean that it has been possible to achieve the goal of the conjunctive management of surface water and groundwater. However, in river basins that suffer from the greatest pressure on water supply, there are strong examples in practice of treating surface water and groundwater as a single resource.

The South Saskatchewan River Basin Plan, which is a plan approved by Cabinet under the *Water Act*, states that within the basin, "Groundwater that readily flows naturally under the ground to... surface water bodies is... considered surface water."<sup>8</sup>

In making decisions on applications for licences or for the transfer of licensed allocations, the Director must consider existing, potential, and cumulative hydraulic, hydrological, and hydrogeological effects. As a guideline to the exercise of discretion, the Director is encouraged to ensure that the application does not create any significant adverse effect in these areas.

These directives were recently applied in the Sentinel Well case, which arose in an area of southwestern Alberta where the government has reserved all unallocated water and it is no longer possible to obtain licences for residential developments. The Environmental Appeal Board affirmed the decision of the Director to reject an application from a developer for a groundwater licence, because of the Director's finding that there was a connection between the proposed well and a nearby lake. In the view of the Board, there was uncertainty whether the well was hydraulically connected to the lake but, in the absence of compelling evidence to the contrary, the precautionary principle justified the Director's decision.<sup>9</sup>

Many commentators advocate the conjunctive management of surface water and groundwater. Far from acting as a barrier, the Alberta *Water Act* is entirely conducive to conjunctive management.

## Are Changes to the *Water Act* Necessary to Protect First Nations' Interests?

A recent study published by the Parkland Institute raises the fact that the *Water Act* is silent on the question of the water claims of First Nations. The study points out that First Nations' water claims precede the establishment of Alberta's entire water allocation system and urges that any reform of Alberta water law must, "at a minimum, seek to reconcile the long-standing marginalisation of indigenous rights to water."<sup>10</sup>

It is true that in the entire history of water allocation on the prairies since 1894, the legislation has made no mention of indigenous rights to water. Although the Act in both its federal and provincial versions did nothing to protect Aboriginal rights, it also showed no intention to extinguish existing indigenous rights. This feature is potentially important, as it is clear that the Crown cannot extinguish Aboriginal or treaty rights by implication. In addition, the administration of the Act did not entirely ignore Aboriginal interests. In Alberta, Indian bands hold licences for a total of more than 80,000 acre-feet of water, with a variety of priorities, the most senior of which dates back to 1904.

It is also notable that Aboriginal groups in the United States faced exactly the same problem as First Nations in Canada, because state water allocation systems also ignored the possibility that Aboriginal rights to water might exist. In 1908, the United States Supreme Court decided a celebrated case, which arose out of the creation of the Fort Belknap Reservation in Montana, in geographical conditions that were virtually identical to those that prevailed in Canada. *Winters v United States* raised the question of whether settlers who held state water rights could maintain dams and reservoirs on the Milk River in any manner that prevented the waters of the river from flowing to the Reservation, where the Indian band had begun to divert water for irrigation. The court noted that the Reservations were created to further the government policy that Indians should become a pastoral people. However, without irrigation, the lands of the Reservation were practically valueless and certainly useless for agriculture. Although the

settlers had begun to use water before the Indian band, the Supreme Court held that by necessary implication the Indian band held a prior water right. It is now clear in the United States that the Indian reserved water rights cannot be extinguished, except by express legislation.<sup>11</sup>

The *Winters* decision has a compelling logic, but it has never been adopted in Canada.<sup>12</sup> However, as a matter of practice, the Government of Alberta has begun to recognize certain previously unlicensed Aboriginal claims to water. For example, in the South Saskatchewan Basin Water Allocation Regulation, the government reserved water in the basin from further licensed allocations, subject to a number of exceptions. The exceptions initially included the provision of 55,000 acre-feet of water for the irrigation of land on Indian reserves.<sup>13</sup> This regulation has been largely subsumed by the Approved Water Management Plan for the South Saskatchewan River Basin. The Plan proposes the establishment of a Crown Reservation for three sub-basins, in order to make unallocated water available for four purposes. The list of purposes includes making water available to First Nations reserves. In addition, the Director, in exercising discretion over water allocation transfers and licence applications in the basin, must consider "First Nation Rights and Traditional Uses."<sup>14</sup>

As the American experience with Aboriginal water rights shows, it is always difficult and disruptive to fit pre-existing Aboriginal rights to water into state systems based on the priority principle. It is impossible to disagree with a comment that contemporary reforms must not reproduce historical injustices by ignoring First Nations claims.<sup>15</sup> For the moment, Alberta appears to be taking the approach of negotiating First Nations' water claims with review to providing an adequate supply of water and reasonable assurance of priority. A landmark agreement to provide a secure water allocation was reached with the Piikani (or Peigan) Nation in 2002<sup>16</sup>. Negotiations are now well underway with the Siksika Nation.<sup>17</sup>

## Endnotes

<sup>1</sup> The *Water Act*, S A 1996 c.W-3.5, s.1(1)(iii), s.15.

<sup>2</sup> Julia Ko and William F. Donahue, *Allocating Our Water: Changing to Meet the Public Interest* (Water Matters, Canmore, Alberta, 2012) at 7.

<sup>3</sup> Henning Bjorlund, *The Competition for Water: Striking a Balance among Social, Environmental and Economic Needs* (C D Howe Institute Commentary No.302, April 2010) at 8.

<sup>4</sup> See, for example, Julia Ko and William F. Donahue, *supra*, endnote 2 at 8. [Footnote 44 doesn't match up]

<sup>5</sup> *Ibid.*

<sup>6</sup> The *Water Resources Amendment Act*, S A 1962, c.99, s.2.

<sup>7</sup> The *Water Resources Amendment Act*, 1981, c.40, s.2(c). The same definition is found in the *Water Act*, S A 1996 c.W-3.5, s.1(1)(ggg).

<sup>8</sup> Approved Water Management Plan for the South Saskatchewan River Basin (Alberta Environment, August 2006)

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<sup>9</sup> *Municipality of Crownsnest Pass v Director, Southern Region, Environmental Management*, Alberta Environment (23 December 2009), Appeal No.08-016-R (A E A B).

<sup>10</sup> Jeremy Schmidt, *Alternative Water Futures in Alberta* (Parkland Institute, Edmonton, December 2011) 15; Julia Ko and William F. Donahue, *supra*, endnote 2 at 8. *supra*.

<sup>11</sup> David H Getches, *Water Law* (3rd.ed., 1997) *supra* 309-311.

<sup>12</sup> In one recent case, it was argued that the government of Alberta had a legal duty to consult an Indian band about the South Saskatchewan River Basin Management Plan. The Indian band's argument was based in part on the *Winters* decision, but the Court of Appeal commented on the *Winters* case: "It is doubtful that the doctrine is applicable in Canada, as its application in the United States has been limited to states that regulate water through a system of prior appropriation – a system which has never existed in Canada" (*Tsuu T'ina Nation v Alberta* (Environment), 2010 ABCA 137, par.75. This reasoning was not necessary for the decision in the *Tsuu T'ina Nation* case. Although the observation that prior appropriation has never applied in Canada is correct, with respect, the judgment overlooks the functional similarity of prior appropriation and the Canadian principle of prior allocation.

<sup>13</sup> *Alta Reg.* 307/1991, s.5.

<sup>14</sup> Approved Water Management Plan for the South Saskatchewan River Basin (Alberta Environment, 2006) at 6 and 14-15.

<sup>15</sup> Jeremy Schmidt, *supra*, endnote 10 at 15.

<sup>16</sup> Merrell Ann S Phare, "Denying the Source: The Crisis of First Nations Water Rights (Rocky Mountain Books 2009) 1-6.

<sup>17</sup> Kelly Cryderman, "Dam dispute settlement worth \$50M to Siksika band," *Edmonton Journal*, December 23, 2010 [http://www2.canada.com/edmontonjournal/news/cityplus\\_alberta/story.html?id=4b9fc09f-81d8-4ff5-b441-8ce17600fad0](http://www2.canada.com/edmontonjournal/news/cityplus_alberta/story.html?id=4b9fc09f-81d8-4ff5-b441-8ce17600fad0), accessed November 3, 2013.

# Water Law in Alberta

Q&A SHEET #6

## THE MANITOBA EXPERIENCE WITH PREFERENTIAL USE

### What Options Exist to Permit Water to be Transferred to New Users?

Many countries around the world use one of four options to permit water to be transferred to new users. It is a remarkable coincidence that the water law of the Western provinces of Canada provides an illustration of each of these options. Many observers comment that they would approve of transfers of water allocations provided that water was moved to a “more important” use. Manitoba has sought to achieve this goal by permitting the transfer of water based on a table reflecting a hierarchy of the relative importance of different uses of water. Saskatchewan allows the transfer of water based on the public interest, as determined by the government. British Columbia has created a safety valve, which allows some transfers to occur by permitting a change in the location of the land to which a water licence is attached. Since 2001, Alberta has allowed, in the southern region of the province, existing licensees to transfer their allocations voluntarily to other licensees or to new users, subject to strict scrutiny by the regulator.

*Q&A Sheet #6* considers preferential use, *Q&A Sheet #7* the public interest, *Q&A Sheet #8* the safety valve approach, and *Q&A Sheet #9* regulated voluntary transfers.

### What is the Table of Preferential Use?

The provisions of Manitoba water law dealing with the transfer of water allocations date back to the federal *Irrigation Act*. In 1919, the Prairie Provinces experienced a particularly dry year. This led federal officials to realize that there was a real possibility that the demand for water would begin

to outstrip supply. As the majority of licences, especially in arid southern Alberta, were held by irrigation districts, the fear developed that growing municipalities would be constrained by an inability to secure an adequate supply of water. In the words of the Minister of the Interior at the time, under the *Irrigation Act*, once “the water right is gone ... there is no provision for recovering it.”<sup>1</sup> In response, the *Irrigation Act* was amended in 1920 to include a list of priority of uses. It set out a hierarchy of water uses for the following purposes.

#### Table of Preferential Use

1. Domestic
2. Municipal
3. Industrial
4. Irrigation
5. Other

The priority list allowed a person who required water for a purpose that ranked higher in the

league table to apply for the cancellation of an existing licence for a lower ranked use and its transfer to the higher priority user. The holder of the cancelled licence was entitled to compensation. If the measure of compensation could not be agreed between the parties, the Minister was required to fix the level of compensation, based on any loss or damage sustained by the previous licensee as a consequence of cancellation.<sup>2</sup> Although the system was based on the principle of preferential use, it also contained a market element. The requirement to pay compensation meant that the person who acquired the cancelled licence must have contemplated a new use of water that was sufficiently productive to cover the costs of compensation.

*For over 60 years, the table of preferential use provided the only method in the Prairie Provinces that permitted a water allocation to be severed from land, and transferred to a new user.*

Because the Act attached a water licence to the land in respect of which it was issued, it was possible to acquire a water licence by purchasing the land to which the licence was attached.

For over 60 years, the table of preferential use provided the only method in the Prairie Provinces that permitted a water allocation to be severed from land and transferred to a new user. Each province re-enacted the table when the federal government transferred the ownership of water resources to the provinces in 1930. The table of preferential use remained essentially unchanged over the decades. Saskatchewan added mineral water and mineral recovery purposes as sixth and seventh on its list of priorities<sup>3</sup> and in 1975, Alberta switched the relative positions of irrigation and industrial uses, and added water power as a fifth priority. The 1975 Alberta amendment on paper suggested that the use of water for irrigation had become “more important” than its industrial use, but there was no real debate on this issue. Indeed, it was portrayed at the time as a symbolic recognition of the importance of irrigation in the province, although in law it eliminated any possibility that irrigation water might have been transferred to industrial use.

The list of priorities remains unchanged in the Manitoba legislation. The transfer of water allocations based on the table of preferential use is now permitted only in places where water is fully allocated, or when the Minister determines that further allocation would negatively affect an aquatic ecosystem. In addition, if the parties are unable to agree, the measure of compensation is now set by arbitration, not by the decision of the Minister.<sup>4</sup> The continued existence of preferential use provides a case study for examining its utility.

## Does the System of Preferential Use Reflect Societal Values About the Best Uses of Water?

**A**lthough the hierarchy of water use was established to ensure that municipal growth would not be constrained due to the use of water by irrigation and industry, like all similar systems, its continued existence can only be justified if it reflects societal values as to the best uses of water. The present table shows the futility of this approach. Even if the table was a perfect record of the social preferences of 1920, it surely would no longer prevail in 2013.

If social preferences do change, it is necessary to go through the difficult and cumbersome process of securing an amendment to the legislation. The preferences also apply across an enormous geographical area. This assumes that the same water priorities apply in the mining region of Thompson as in the rich agricultural land of the Assiniboine River basin. After the Alberta amendments of 1975, irrigation was assumed to be a higher priority use of water in both Lethbridge and Fort McMurray. Under the table of priorities, water can be transferred only upwards towards a higher priority, not vice versa, and never laterally. Hence, in Manitoba a new irrigator could not seek to cancel the licence of an industrial user, or even another irrigator, regardless of how much more efficient and productive the projected use might be. **The transfer based on a hierarchy of uses does nothing to encourage increased productivity and efficient water use within each category.**

Perhaps because of these deficiencies, there is no evidence that this method of transferring water allocations has been employed, except perhaps on extremely rare occasions. It can potentially apply to relieve the pressure on water supply only in the event that an important new use of water happens to fit within a high priority category.

<sup>1</sup> Canada, Parliament, House of Commons, *Debates* (17 June 1920) at 3695.

<sup>2</sup> The *Irrigation Act*, S.C. 1920, c.55, s.4.

<sup>3</sup> See the last consolidation of the *Saskatchewan Water Rights Act*, R.S.S. 1978 c.W-8, s.15 (3).

<sup>4</sup> See *The Water Rights Act*, C.C.S.M., c.W80, ss.9 and 14.

# Water Law in Alberta

Q&A SHEET #7

## THE SASKATCHEWAN EXPERIENCE WITH WATER TRANSFER & THE PUBLIC INTEREST

### What Options Exist to Permit Water to be Transferred to New Users?

**M**any countries around the world use one of four options to permit water to be transferred to new users. It is a remarkable coincidence that the water law of the Western provinces of the Canada provides an illustration of each of these options. Manitoba permits the transfer of water based on a table reflecting a hierarchy of the relative importance of different uses of water. Other observers support the transfer of water allocation when it is in the public interest. Saskatchewan effects this approach by allowing the transfer of water based on the public interest, as determined by the government. British Columbia has created a safety valve, which allows some transfers to occur by permitting a change in the location of the land to which a water licence is attached. Since 2001, Alberta has allowed, in the southern region of the province, existing licensees to transfer their allocations voluntarily to other licensees or to new users, subject to strict scrutiny by the regulator.

*Q&A Sheet #6* considers preferential use, *Q&A Sheet #7* the public interest, *Q&A Sheet #8* the safety valve approach, and *Q&A Sheet #9* regulated voluntary transfers.

### How Can the Public Interest be Protected?

**I**n 1984, Saskatchewan was the first Prairie Province to break away from allowing transfers of water allocations based on the table of preference. The *Water Corporation Act* (1984)<sup>1</sup> marked an important set of changes in Saskatchewan water law. By abolishing the table of preference, it removed the only previous provision that allowed the transfer of water rights to new uses. The Act transferred all of the administration of water rights from the government to the Saskatchewan Water

Corporation and compressed the law of water rights in Saskatchewan into seven statutory sections.

The Act replaced the limited transfer provision by creating a draconian power that allowed the Corporation to cancel any existing water right, with the approval of Cabinet, where the Corporation considered it “in the public interest to do so.” This power purported to extend even to water rights granted by the federal government prior to 1930. The holder of the cancelled right was entitled to compensation based on the residual value, at the time of cancellation, of any structures or works to secure and transport water that became redundant through the cancellation. These infrastructure were surrendered to the Crown.<sup>2</sup>

*In the absence of any rules or guidelines relating to the accommodation of new water users, the Act failed to deal with this and every other difficult issue in the administration of water rights and by default left them to be decided bureaucratically on the basis of the vague principle of the public interest.*

The Act also removed all reference to the principle of priority in time. What remained was a provision that all previous rights (including presumably their priority) remained in full force and effect until they were amended or cancelled by the Water Corporation.<sup>3</sup>

In theory, this provision created an element of flexibility in Saskatchewan water law. It clearly allowed the Water Corporation to cancel any existing water right and then to reallocate the water to a new user. However, the legislation created a blunt instrument. In the absence of any rules or guidelines relating to the accommodation of new water users, the Act failed to deal with this and every other difficult issue in the administration of water rights. By default, it left such issues to be decided bureaucratically on the basis of the vague principle of the public interest.

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Q&As are Based on “A Legal and Institutional Analysis of Alberta’s Water Allocation System: Theme 1” by David R. Percy, Q.C., Borden Ladner Gervais Chair of Energy Law and Policy, Faculty of Law, University of Alberta and “Theme 2” by David R. Percy Q.C. with assistance from Greg Lane, LL.M. Candidate. December 2013.

The ill-considered *Water Corporation Act* of 1984 was so riddled with defects that further reform was inevitable. The Water Corporation was replaced by the Saskatchewan Watershed Authority in 2002 and an element of objectivity was introduced in the licence cancellation proceedings. If the parties were unable to agree on compensation for cancellation, the matter was to be determined by arbitration before a judge of the Court of Queen's Bench of Saskatchewan.<sup>4</sup> A further restructuring occurred in 2005, with the creation of the *Water Security Agency Act*.<sup>5</sup> The 2005 Act made some changes to Saskatchewan water law, but the Agency retained the power to cancel an existing licence. This remains the only method of accommodating new users in basins that are reaching the point of full allocation.

**T**he Saskatchewan solution to the problem of accommodating new uses of water, in common with the Manitoba approach, creates problems of practicality. If a person wishes to acquire a new water right in Saskatchewan, it is necessary to persuade the Cabinet to cancel an existing licence and then to seek a new licence from the Agency. In practice, this means that any transfer to a new use will be rare. The Manitoba system is slightly less cumbersome, but it still depends on convincing the relevant Minister to take the controversial action of cancelling the licence of an existing water user. These administrative rules suffer from the same defects as the original common law systems: "they do not promote the optimum use of water and are too rigid to adapt to changing societal priorities."<sup>6</sup> Especially in an era of climate change, systems of water allocation must be adaptable to changing circumstances. In practical terms, the Saskatchewan and Manitoba legislation lacks any real flexibility to deal with changing requirements in water supply.

In principle, the Saskatchewan solution appeals to many commentators because it allows the

reallocation of water in the public interest. However, as Nigel Bankes has commented in the context of market transfers, "government allocations will likely prove inefficient, favouring (for political reasons) low value uses, such as irrigated agriculture, rather than alternative higher value industrial and municipal uses."<sup>7</sup> Indeed, experience shows that society benefits from enabling water to be transferred between users, often in small quantities. As the vast majority of these small transfers are not controversial and do not raise major issues of public policy, it is simply unnecessary to require a Cabinet determination of the public interest before **any** transfer can occur.

**E**ven when high-level decisions on water allocation have to be made, governments have had difficulty reaching objective determinations of what the public interest requires. The principle that governments can determine the best use of water was once a cornerstone of decision-making on major allocations on the Canadian Prairies. When the Prairie Provinces Water Board (PPWB) was established in 1948, the Board was given the power "to recommend the best use to be made of interprovincial waters in relation to the associated resources in Manitoba, Saskatchewan, and Alberta and to recommend the allocation of water between each province."<sup>8</sup> The history of the PPWB shows the difficulty of applying in practice the superficially attractive principle of allocating water according to its best use. The PPWB was almost immediately faced with competition between an Alberta request for the increased allocation of water to irrigation projects and a Saskatchewan request for the provision of water to what was then known as the South Saskatchewan River Project. An inability to determine which of these ideas represented the "best use" of water caused a deadlock in the PPWB and was almost responsible for "blowing up" an organization which, in many other respects, was a model of inter-jurisdictional cooperation.<sup>9</sup>

## Endnotes

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<sup>1</sup> *The Water Corporation Act*, S.S. 1983-84, c.W-4.1. 9

<sup>2</sup> *Ibid*, s.42(1), (2).

<sup>3</sup> *Ibid*, s.80(1).

<sup>4</sup> *The Saskatchewan Watershed Authority Act*, SS 2002, c S-35.02. The arbitration provision is found in s.42 (4).

<sup>5</sup> *The Water Security Agency Act*, SS 2005, c W-8.1, <http://canlii.ca/t/5231k> retrieved on 2013-11-15.

<sup>6</sup> Oliver M Brandes and Linda Nowlan, “Wading into Uncertain Waters: Using Markets to Transfer Water Rights in Canada—Possibilities and Pitfalls” (2009) 19 J.E.L.P.267, 274.

<sup>7</sup> Nigel Bankes, “The Legal Framework for Acquiring Water Entitlements from Existing Users” (2006) 44 Alta. L. Rev. 323, 331.

<sup>8</sup> See Barry Barton, “The Prairie Provinces Water Board as a Model for the Mackenzie Basin,” in *Institutional Arrangements for Water Management in the Mackenzie River Basin* (Barry Sadler, ed., Calgary, University of Calgary Press, 1984) at 45.

<sup>9</sup> David R Percy, “Resolving Water-Use Conflicts: Insights from the Prairie Experience for the Mackenzie River Basin” Commentary No. 341, (Toronto: CD Howe Institute, 2012), 8.



# Water Law in Alberta

Q&A SHEET #8

## THE BRITISH COLUMBIA EXPERIENCE: A HIDDEN SAFETY VALVE

### What Options Exist to Permit Water to be Transferred to New Users?

**M**any countries around the world use one of four options to permit water to be transferred to new users. It is a remarkable coincidence that the water law of the Western provinces of the Canada provides an illustration of each of these options. Manitoba permits the transfer of water based on a table reflecting a hierarchy of the relative importance of different uses of water. Saskatchewan allows the transfer of water based on the public interest, as determined by the government. British Columbia's legislation contains a safety valve, which allows some transfers to occur by permitting a change in the location of the land to which a water licence is attached. Since 2001, Alberta has allowed, in the southern region of the province, existing licensees to transfer their allocations voluntarily to other licensees or to new users, subject to strict scrutiny by the regulator.

*Q&A Sheet #6* considers preferential use, *Q&A Sheet #7* the public interest, *Q&A Sheet #8* the safety valve approach, and *Q&A Sheet #9* regulated voluntary transfers.

### What is the Safety Valve Approach?

**W**ater law in British Columbia has unusually deep roots. It dates back to the time of the Gold Rush when the colony's first Chief Justice, Matthew Begbie, sought to introduce law and order by drafting the *Gold Fields Act* of 1859, which allowed miners to obtain a form of water rights. The legislation was influenced by earlier gold rushes in Australia, New Zealand, and California. As the California Gold Rush had also been the birthplace of the American doctrine of prior appropriation, it is hardly surprising that British Columbia

incorporated some of the same American doctrines as the Prairie Provinces.<sup>1</sup>

Despite its different starting points, by 1897 the scheme of British Columbia water law was in principle almost identical to that of the *North-west Irrigation Act*. The present day British Columbia *Water Act* continues to be very similar to the basic model of prairie water law. It vests in the government all water found in natural watercourses, and the government has long allocated water by granting licences to water users in a manner that is almost identical to that found in the Prairie Provinces. If there is insufficient water to supply all licensees, the right to take water is determined by the principle of prior allocation in much the same way as the *North-west Irrigation Act*. Every licence is also required to be appurtenant to land in British Columbia.<sup>2</sup>

British Columbia also faced the problem of accommodating new users once a water basin was fully allocated. No government can fail to provide water to all potential new users, so legislators and administrators have to find some way of creating a degree of flexibility. In British Columbia, both the existing *Water Act* and the not yet proclaimed *Water Sustainability Act*, allow the transfer of water allocations through a rather opaque process. Both the old and the new Act require that all licences must be appurtenant to the land, mine, or undertaking in respect of which they are issued. The normal rule is the same as that found in the Prairie Provinces: licences are attached to land and are transferred whenever there is a conveyance of the land to which the licence is appurtenant. The provisions that in practice allow the transfer of a water allocation are found in a section that is entitled "transfer of appurtenancy." A transfer of appurtenancy requires an application to change the parcel of land to which a water licence is attached.

The process for the approval of transfers of appurtenancy is highly discretionary. Applicants are required to give notice of their application in a manner directed by the Comptroller of Water Rights or the regional water manager. However, the requirement of notice can be waived, if no other person's rights will be injuriously affected by the transfer. The responsible official may then transfer all or part of the rights and obligations found in the original licence from the holder to the proposed transferee, and to issue a new licence to the transferee. The official may determine the land to which the new licence will be appurtenant, provided that the land is within British Columbia.<sup>3</sup>

The transfer of appurtenancy provisions allow licensed water rights to be severed from land and to be transferred, in whole or in part, to an entirely new parcel of land. However, standing alone, a change in appurtenancy would not allow a person to put water to a new and different use. This step must be accomplished by making an application to the responsible official who has discretion to authorize the use of water for some purpose other than that specified in the licence.<sup>4</sup> The combination of a transfer of appurtenancy and change of use can thus allow the full transfer of a water allocation. For example, it can allow a person who holds a licence to use 100,000 acre-feet of water per year for irrigation to transfer that allocation to a person who wishes to use the same quantity of water for industrial use at an entirely different location.

Remarkably, in practice, British Columbia allows the same type of water allocation transfers as Alberta. However, the British Columbia Act contains none of the detailed precautions set out in the Alberta *Water Act*. The decision whether to allow a transfer of appurtenancy and change of use is left entirely to an exercise of discretion on the part of the responsible official, without any safeguards. A technical guideline issued in 2003 provides only a suggestion on the exercise

of discretion. It requires the official to make a determination that the land to which the licence will be transferred is “suitable and consistent with the purpose contained within the existing licence.”<sup>5</sup> This wording suggests that perhaps the original transfer provisions were intended to deal with a transfer from one agricultural purpose to another. It seems quite redundant if the transfer contemplates a change in the purpose of water use.

It is difficult to find any public information about the operation of the transfer of appurtenancy provisions, perhaps because the procedure is “little used.”<sup>6</sup> However, a 2005 decision of the Environmental Appeal Board in the Hotel Lake case provides a picture of how this type of transfer works and illustrates some of its major drawbacks. In that case, Sunshine Coast Regional District (“Sunshine Coast”) had sought the transfer of the appurtenancy of two licences held by Garden Bay Waterworks District (“Garden Bay”) that had been issued in 1946 and 1972 respectively for the diversion of 11.315 million gallons of water per year from Hotel Lake. The case posed a classic problem in the area of water transfers. For a number of years, Garden Bay had not diverted from the lake the maximum volumes of water allowed under its licence, but it retained the two licences for possible future growth and for use in the case of an emergency.

The transfer would thus not increase the theoretical maximum amount of water removed from Hotel Lake by licensees, but it would result in a significant increase in the actual amount of water withdrawn.

By 2005, it appeared that the waters of Hotel Lake were fully allocated, and that no new licences were likely to be issued. Nevertheless, the Assistant Regional Manager had essentially approved the transfer and had issued two conditional water licences to Sunshine Coast in substitution for the licences were originally held by Garden Bay. A number of owners of riparian land on Hotel Lake appealed the

decision. The primary issue for the Environmental Appeal Board concerned the possible impact of the decision on Hotel Lake. The Board decided that prudent water management required an assessment of how much water in total could be safely withdrawn from the lake before the entire transfer could be approved. It noted that Sunshine Coast would not require the total amount of water involved in the transfer for a number of years. As a result, it required the Regional Manager to limit the amount of water that could be withdrawn under the transferred licences “to the reasonable current and immediately foreseeable” water needs of Sunshine Coast, pending an assessment of the minimum lake levels required by Hotel Lake.<sup>7</sup> The decision illustrated how the legislation permits the transfer of water allocations, even though the Board finally gave only a partial approval of the licence transfers.

**T**he Hotel Lake decision highlights the serious weaknesses of the transfer of appurtenancy provisions, which essentially allows the transfer of water rights

without any significant rules to guide the exercise of discretion. It is remarkable that the *Water Act* allows the responsible official to dispense with the requirement to provide notice to potentially affected parties in any case, even when the new user is likely to use much more water than the previous licensee. In contrast, if Sunshine Coast had applied for a new licence, certain groups such as other licensees and riparian owners would have had an unrestricted right to file objections.<sup>8</sup> In particular, in jurisdictions where legislation authorises the transfer of water rights, it is normal to subject the transfer application to the same scrutiny as an application for a new licence. It is also unusual to allow the approval of a transfer unless the appropriate official has determined that the transfer will not adversely affect the aquatic environment and has considered the amount of water historically diverted under the old licence.<sup>9</sup> **The British Columbia legislation thus acts as a safety valve to enable some transfers of existing water rights, but fails to include any explicit criteria against which applications for transfer must be measured.**

## Endnotes

<sup>1</sup> David R Percy “Water Law of the Canadian West: Influences from the Western States” in John McLaren et al, eds., *Law for the Elephant, Law for the Beaver: Essays in the Legal History of the North American West*. (Pasadena: Ninth Judicial Circuit Historical Society, 1992) 274 at 277-281.

<sup>2</sup> The *Water Act*, R.S.B.C. 1996 c.483, ss.2, 5, 10-12, 15.

<sup>3</sup> The *Water Act*, R.S.B.C. 1996 c.483, s.19.

<sup>4</sup> *Ibid.*, s.18(1)(g). As with the transfer of appurtenancy provisions, and application for change of purpose requires notice only to those whose rights would be “injuriously affected” by the change.

<sup>5</sup> [http://www.env.gov.bc.ca/wsd/water\\_rights/policies/cabinet/appurtenancy.pdf](http://www.env.gov.bc.ca/wsd/water_rights/policies/cabinet/appurtenancy.pdf), accessed November 26, 2013.

<sup>6</sup> Oliver M. Brandes, Linda Nowlen and Katie Paris, “Going with the Flow? Evolving Water Allocations and the Potential and Limits of Water Markets in Canada” (Ottawa, Conference Board of Canada, 2008) 27.

<sup>7</sup> Province of British Columbia, Environmental Appeal Board “*DECISION NOS. 2004-WAT-003(b) and 2004-WAT-004(b)*” (March 23, 2006) at 3. online: Province of British Columbia [http://www.eab.gov.bc.ca/water/2004wat003b\\_004b.pdf](http://www.eab.gov.bc.ca/water/2004wat003b_004b.pdf).

<sup>8</sup> The *Water Act*, R.S.B.C. 1996 c.483, s.11.

<sup>9</sup> These factors are explicitly mentioned in the transfer provisions of the Alberta *Water Act*, considered in *Q&A Sheet #9*.

# Water Law in Alberta

Q&A SHEET #9

## WHAT IS THE ALBERTA EXPERIENCE WITH REGULATED VOLUNTARY TRANSFERS?

### What Options Exist to Permit Water to be Transferred to New Users?

**M**any countries around the world use one of four options to permit water to be transferred to new users. It is a remarkable coincidence that water law in the Western provinces of Canada provides an illustration of each of these options. Manitoba permits the transfer of water based on a table reflecting a hierarchy of the relative importance of different uses of water. Saskatchewan allows the transfer of water based on the public interest, as determined by the government. British Columbia has created a safety valve, which allows some transfers to occur by permitting a change in the location of the land to which a water licence is attached. Many economists have favoured some form of market-based transfers. Since 2001, Alberta has allowed, in the southern region of the province, existing licensees to transfer their allocations voluntarily to other licensees or to new users, subject to strict scrutiny by the regulator.

*Q&A Sheet #6* considers preferential use, *Q&A Sheet #7* the public interest, *Q&A Sheet #8* the safety valve approach, and *Q&A Sheet #9* regulated voluntary transfers.

### What was Alberta's Experience with Water Law Reform after 1989?

**W**hen Alberta began its own process of water law reform in 1989, it faced, in its southern region, a greater intensity of water use and competition for water than any other jurisdiction in Canada. For nearly 70 years, the *Alberta Water Resources Act* had allowed

transfers based on a hierarchy of water use, in much the same way as present-day Manitoba. It had the benefit of examining Saskatchewan's water law reform of 1984, but Alberta showed no appetite for the compulsory reallocation of water from existing to new users. Instead, based on the experience of Australia and some parts of the western United States, the government chose to create a legislative structure which allowed, under strict conditions, the voluntary transfer of all or part of a licensed allocation from an existing licensee to a new user.<sup>1</sup>

*Alberta showed no appetite for the compulsory reallocation of water from existing to new users. Instead, ...the government chose to...[allow] the voluntary transfer of all or part of a licensed allocation from an existing licensee to a new user.*

As is commonly the case, the idea of transferable water allocations was controversial during the reform process. In response to public concerns, the *Alberta Water Act* permitted transfers only with an important political safeguard. The Act allows an application for the transfer of a water allocation only where it is authorized by either an approved water management plan or by Cabinet through an Order in Council.<sup>2</sup> As a water management plan must also be "approved" by the Cabinet,<sup>3</sup> the Act ensures that strong political oversight would be brought to bear before a decision could be taken to allow transfers in any region. However, after the Act was proclaimed in 1999, a succession of hot, dry summers, culminating in the severe drought of 2001, made the pressure to allow changes in water use irresistible. In 2002, the Cabinet approved the South Saskatchewan Basin Water Management Plan ("SSRB Plan"), which authorized the Director to consider applications to transfer water allocations in the regions of the province where they were most needed.<sup>4</sup>

## How Can Water Transfers Occur in Alberta?

**A**lthough the changes to the *Water Act* were often criticised for allowing a market in water allocations, they permit transfers to occur only in a strictly regulated environment. **The philosophy of the Act is to subject applications for transfers to the same level of scrutiny as applications for new licences.**

The southern tributaries of the Oldman River were closed to new licence applications on an interim basis in 2002<sup>5</sup> and it has not been possible to issue new licences (with very limited exceptions) in the Bow, Oldman, and South Saskatchewan river basins since 2007.<sup>6</sup> As a result, the transfer system provides the only general method of obtaining a new water allocation in a large area of southern Alberta.

The Act requires the Director to ensure that three mandatory requirements are fulfilled before a transfer can be approved and the Director may take into account a further seven discretionary factors in reaching a decision. The mandatory matters are directed at ensuring that the volume of water transferred does not exceed the volume of water stipulated in the original licence; that the transfer of the allocation, in the Director's opinion, does not impair the exercise of the rights of other authorized water users without their consent; and that the transfer, in the Director's opinion, will not cause a significant adverse effect on the aquatic environment. In addition, the Director must consider all the matters and factors identified in the approved water management plan. The South Saskatchewan River Basin Plan lists 14 such matters and factors. Some of them repeat items dealt with in the Act, but in all cases they provide very useful guidelines to the exercise of the Director's discretion.

## How Does the South Saskatchewan River Basin Plan Address Water Transfers?

**T**he combination of the Act and the South Saskatchewan River Basin Plan essentially requires the Director to apply the principle that a transfer must result in no net harm, either to other water users or to the environment, before granting an approval to an application. This principle affects modern water law in parts of the western United States.<sup>7</sup>

The *Water Act* also contains a potentially useful section that allows the temporary assignment of a water allocation. It permits a water allocation to be temporarily assigned upon written agreement, without prior approval from the Director. The Director has the power to order that the diversion of water under an assignment must cease if it causes, or may cause, an adverse effect on the rights of other water users or on a water body or the aquatic environment.<sup>8</sup>

The advantage of an assignment is that allows an instant response to avert a crisis, such as the impending loss of valuable crop during hot and dry weather. Assignments played a significant role in the water sharing agreement during the 2001 drought.<sup>9</sup> The assignment provision has two major limitations. It can only permit the use of water by a person who is an existing licensee or an existing traditional agricultural user. It does not, therefore, enable a new user to obtain water from an existing user. Secondly, the licensee or traditional agricultural user who obtains an assignment must not divert in total more water than is authorized under its existing water allocation. In effect, it allows the assignee essentially to take water under circumstances when it might otherwise be prevented from doing so under the priority system. This limitation is unfortunate, as from a water management perspective many assignments might be acceptable as long as they do not result in an increase of the total amount diverted by both the assignor and the assignee. However, if the section is extended to cover this possibility, it will be necessary to consider restricting the duration of a temporary assignment to a single season.

## Endnotes

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<sup>1</sup> The *Water Act*, S.A. c. W-3, s.11(2)

<sup>2</sup> The *Water Act*, s.81(7).

<sup>3</sup> The *Water Act*, s.11(1).

<sup>4</sup> Alberta Environment, South Saskatchewan River Basin Water Management Plan, Phase One, Water Application Transfers (2002) 7. The recommendation to close the southern tributaries was adopted by the Director.

<sup>5</sup> *Id.* at 12.

<sup>6</sup> Under the *Bow, Oldman and South Saskatchewan River Basin Water Allocation Order*, Alta Reg 171/2007, ss. 4, 6 and 8, with minor exceptions, new licences can be issued only in respect of First Nations lands or projects, for a water conservation objective, for storage that both benefits the environment and improves the availability of water to holders of existing rights and in respect of applications that were complete before the effective date of the Regulation.

<sup>7</sup> The *Water Act*, s. 82(3).

<sup>8</sup> The *Water Act*, s.33.

<sup>9</sup> David R Percy, “The Principle of Prior Allocation and Water Management in Alberta” (2013) at 26-29.

# Water Law in Alberta

## COMMON CRITICISMS OF TRANSFERABLE WATER ALLOCATIONS

### What are Some Common Criticisms of Transferable Water Allocations in Alberta?

The large amount of commentary on Alberta water law that has emerged over the last dozen years is often highly critical of Alberta's system of transferable water allocations. The criticisms range from a fundamental challenge to the idea of allowing any type of market-based water transfers to careful consideration of the details of the existing provisions of the *Water Act*. The front section of this Q&A Sheet will consider a number of the recurring criticisms of the existing system. The final Q&As will address the deeper objections to any form of market transfer.

Each of the main lines of criticism are listed, and covered below.

- Intensification of water use can put dangerous pressures on river systems.
- Transferable water allocations create windfalls for existing licensees.
- When deciding whether to approve a transfer, the Director is not required to consider First Nations' rights and traditional uses.
- There is a tension between the need for flexibility in the transfer of water allocations and the required level of protection of the public interest.
- There should be no form of market transfer in Alberta.

### Will Transfers Result in Intensification of Water Use and put Undue Pressures on River Systems?

Many transfer systems can result in an overall increase in water use, to the detriment of a river system. A good

example is provided in British Columbia, whose legislation does not allow the transfer of water allocation directly, but permits some flexibility through enabling the appurtenancy of a water licence to be transferred. The Hotel Lake case (see *Q&A Sheet #8*) involved what some describe as a "sleeper" or a "dozer" licence. Although these are not terms of art, the licensee under a sleeper licence may not be using any of its water allocation at the time of transfer, and under a dozer licence may be using only part of its water allocation. If a person who acquires a water allocation as a result of a transfer puts all the licensed water to use, then there will be less water in the water body from which it is withdrawn. Danielle Droitsch and Barry Robinson expressed this concern when they stated that "there is a real concern that the water rights trading market will only increase the use of water as licensees sell or utilize "sleeper" licences or unused water, thus compounding the current pressures on river systems."<sup>1</sup>

Naturally, a modern water transfer system must address this issue. In Alberta, the *Water Act* states that in evaluating an application for transfer, the Director may consider "the allocation of water that the licensee has historically diverted under the licence."<sup>2</sup> As many commentators have observed, this can be a weak protection because it means that Director may, or may not, choose to take that factor into consideration. However, the same protection is reinforced by the South Saskatchewan River Basin Plan, so that it is now elevated into a factor that the Director *must* consider. In fact, the South Saskatchewan River Basin Plan sets a clear directive for the Director's decision that the "only net use portion of the allocation is transferable."<sup>3</sup> In contrast, systems like British Columbia's, which allow transfers through a hidden system, do not regulate the intensification of water use. There are many ways of ensuring that water transfer systems do not allow the transfer of more water than the

original licensee has ordinarily put to use. The commonest technique is to restrict the amount of water that can be transferred to the amount that reflects the quantity actually consumed by the original licensee. The combination of the *Water Act* and the South Saskatchewan River Basin Plan provides a reasonably functional assurance that this rule will be applied to transfers in Alberta.

The Alberta system of allowing voluntary transfers also provides a modest antidote to the tendency to intensify water use. In approving a transfer, the Director may withhold up to 10 percent of an allocation of water from the licence that is being transferred in order to protect the aquatic environment or to implement a water conservation objective.<sup>4</sup> Thus, as will be seen in a later example, in a transfer for 2000 acre-feet of water, the Director is entitled to withhold 200 acre-feet for these public interest purposes. Many commentators have pointed out that the Director's powers are discretionary, but the South Saskatchewan River Basin Plan recommends that the Director should make the 10 percent holdback unless there is a compelling reason to withhold less.<sup>5</sup> There is no evidence that the Director has failed to retain the holdback in any case where there was a good reason to do so.

### **Do Water Transfers Result in Windfalls for Existing Licences?**

**I**n the debates that preceded the passage of the *Water Act*, and in some of the recent commentaries, it has been argued that transferable water allocations create windfalls for existing licensees. This argument has two branches, which relate respectively to environmental flows and social equity.

The environmental flow argument points out that existing licensees have priority over the minimum levels of flow that should be retained in a water body for environmental reasons. If the government wishes to reclaim water for environmental reasons, by limiting or cancelling an existing water licence issued under the *Water Act*, it will be required to pay compensation to the licensee.<sup>6</sup> This means that the public is

required to pay licensees to reclaim in the public interest a government-owned resource, which was originally granted free of charge to licensees. This conclusion is a correct interpretation of the current *Water Act*. However, the requirement to pay compensation in these circumstances does not arise from the legal nature of a water allocation. It is a result of a deliberate public policy choice by the Legislature as reflected in the Act.

The social equity argument is based on an objection to paying potentially "millions" of dollars<sup>7</sup> to a licensee who (or whose predecessors) obtained a water licence free of charge, many decades earlier. This argument neglects a key goal that lay behind the creation of transferable water allocations in the first place, as well as the history of resource management in Alberta. An ideal water transfer occurs if an existing licensee is able to save water by finding a way, often through technology, to use less water than before. Until it became possible to transfer the saved water, there was no incentive to invest in exploring innovative ways or in adopting technology to save water.<sup>8</sup> Even if a particular transfer does not require water saving investments, it will mean at the very least that the original licensee will forego certain opportunities that existed before the transfer. For example, an original licensee who used water for irrigation purposes would no longer be able to sell land as irrigated land and would thus receive approximately one half of the price it could have been obtained prior to the transfer.<sup>9</sup> Those who are concerned with the possibility that the transfer of water allocations might create windfalls appear to neglect the fact that if transfers had remained impossible, the windfall would often remain, but in the form of the increased value of land to which water licences were attached.

**P**resumably if society were concerned about windfalls accruing as a result of initial grants of resources that occurred decades ago, it would have chosen to capture at least a portion of the price obtained from the sale of homestead farms, which were also provided to the original owners for a nominal price.



Instead, policy seemed to recognize that if settlers expended time and effort in putting land to agricultural use, they could capture any resulting increase in value of land. The present policy of water transfers recognises similar efforts and investments that were made in putting water to valuable use. In addition, it has been pointed out that in other jurisdictions which suffer more severe water shortages than Alberta, water markets have eased an inevitable transition from certain types of irrigated agriculture by providing a nest egg for farmers wishing to leave the industry.<sup>10</sup>

### **How are Aboriginal Interests Protected by the *Water Act*?**

In the many discussions of the place of Métis and First Nations' interests in Alberta water management, the main focus has been the recognition of aboriginal water rights within the provincial allocation system, as discussed in *Q&A Sheet #5*. In addition, there is general agreement that contemporary reforms must not perpetuate historical injustices by ignoring aboriginal claims.<sup>11</sup> *Q&A Sheet #5* describes some of the efforts that are being made to incorporate indigenous water rights in Alberta's prior allocation system.

### **Does the Transfer of Water Allocations Prejudice Aboriginal Rights to Water?**

The rules applicable to transfers in the South Saskatchewan River Basin Plan accord a degree of respect that has not previously been found in Alberta water law. In considering whether to approve an application for transfer, the Director must consider the factor of First Nation rights and traditional uses, because the South Saskatchewan River Basin Plan establishes this as a mandatory requirement.<sup>12</sup> The South Saskatchewan River Basin Plan sets out three factors to guide the exercise of the Director's discretion. They stipulate compliance with government consultation policies, compliance with provincial guidelines on land management and resource development, and agreements with

First Nations. The provisions of the South Saskatchewan River Basin Plan are certainly not a cure to aboriginal concerns about water management, but they provide a recognition of traditional uses and a reasonable assurance that the transfer of water allocations will not prejudice the rights of First Nations.

### **How do Unused Water Allocations Affect Instream Flow Needs?**

Many discussions of transferable water allocations in Alberta emphasize the need to ensure that the possible negative results of transfers are avoided. In broad terms, they focus on ensuring, through the approval process, that the transfer of water allocations reflects the "no net harm" principle by avoiding adverse effects on the environment or on other water users. As a result, the discussions properly focus on the safeguards required for water transfers, but at the same time they are critical of a perceived lack of activity in transfers. One study comments that "Alberta's existing water market has not been very active. In part, this is due to the strict conditions that must be met for a transfer to be approved and because the process for approval can cause lengthy delays."<sup>13</sup> There is thus a tension between suggesting the need for flexibility in the transfer of water allocations and the required level of protection of the public interest.

In a series of interviews with major water users, some senior licensees reported that they did not use a percentage (which ranged from 36 to 50 percent) of their existing allocations and saw the unused water as security against future risk, including increased growth.<sup>14</sup> In a nutshell, when the voluntary transfer of water allocations was first permitted, some licensees already held generous licences, while others held just enough water to cover their then current use. The more generous licences in southern Alberta are often held by hydro-electric companies, municipalities, or irrigation districts. Some of these organizations regard their licences as a birthright. There may be unused water in their licences, but they are reluctant to part with water for a variety of

reasons. This reluctance makes it difficult for newcomers and those who wish to increase their existing allocation to obtain water and may prevent the transfer system from becoming as active as would otherwise be the case.

In considering this issue, it must first be emphasized that many allocation systems allow some types of users to hold a larger water allocation than they can immediately use. Even prior appropriation, which nominally restricts a water right to the amount that the appropriator can put to beneficial use, recognized the “growing cities doctrine.” The doctrine allows municipalities to hold unused appropriation rights to accommodate future growth without violating the general rule that prohibits holding unused water for speculation.<sup>15</sup>

**T**he *Water Act* allows a licence to be cancelled only if a licensee has failed to use any water for a three-year period. It contains no provision to deal with a situation in which a licensee has used less than its full licensed allocation over a prolonged period of time. The first step in analyzing unused water allocations is thus for the Province to determine whether it is desirable to permit existing licensees to retain more water than they actually use or to allow a portion of the water that is licensed, but unused, to be reallocated through the transfer system. If there is a desire to reallocate some of the unused water, there are a variety of tools with differing degrees of intrusiveness that can be employed. At one end of the spectrum, the government could levy a small charge on each acre-foot of water held under the terms of a licence. Depending on the charge, the licensee could choose to retain only the water genuinely needed for its future use and to release the remainder for possible transfer. At the other end of the spectrum, the province could limit a licensee to holding water that covers only its present needs and reasonable projections for future growth over a fixed period. The authorized volume of water under the licence

could be reduced to that level and the remaining volume could be released. Professor Nigel Bankes has suggested a system based on this principle. It would identify the amount of unused water as of a fixed date, such as 1999, when the *Water Act* came into force, or June, 2002, when transfers in the South Saskatchewan Basin were first approved. The government would then remove without compensation any volume of water that was unused at the fixed date. There are many ways to deal with the water that is liberated from existing licences under this type of scheme. According to Professor Bankes’ suggestion, the unused water could be added to instream licences held by the Crown. Alternatively, the unused water could be used for a combination of meeting instream flow needs and accommodating new users. Under Professor Bankes’ approach, licensees would be entitled to object to such reallocation on the basis of a variety of factors, which would be specified in the legislation.<sup>16</sup>

In between the extremes of creating an incentive by way of a water charge to make unused water available and forcibly removing the water from existing licensees, two advisory groups made other recommendations that contemplated the use of incentives and statutory changes if necessary and restricting licences to holding water for which there was a reasonable prospect of use.<sup>17</sup>

### **Should there be a Form of Market Transfer in Alberta?**

**D**espite the volume of critical commentary, it is important to note that many detailed discussions support a version of the idea of market transfers of water allocations.<sup>18</sup> The commentary is generally directed to examining whether there are sufficient safeguards in the existing system and suggesting other ways in which the system could be improved.

## Endnotes

<sup>1</sup> See, e.g., Danielle Droitsch and Barry Robinson, “Share the Water-Building a Secure Water Future for Alberta” Water Matters and Eco-justice (2009) endnote15, Julia Ko and William F. Donahue, Allocating Our Water: Changing to Meet the Public Interest (Water Matters, Canmore, Alberta, 2012) at 7, Jeremy Schmidt, Alternative Water Futures in Alberta (Parkland Institute, Edmonton, December 2011, 26.

<sup>2</sup> The *Water Act*, s.82(4) (c) (iii).

<sup>3</sup> Approved Water Management Plan for the South Saskatchewan River Basin (“SSRB Plan”) (Alberta Environment, August 2006) 14.

<sup>4</sup> The *Water Act*, s.83.

<sup>5</sup> SSRB Plan, *supra*, endnote 3 at 12.

<sup>6</sup> Jason Unger, “Equity and the Water Act: First in Time, First in Right and Water Transfers Raise Questions of Public Interest” 23 News Brief No.3 (Environmental Law Centre, Edmonton, 2008) available at: [http://www.elc.ab.ca/Content\\_Files/Files/NewsBriefs/Vol.23No.3.pdf](http://www.elc.ab.ca/Content_Files/Files/NewsBriefs/Vol.23No.3.pdf), accessed November 30, 2013.

<sup>7</sup> Jason Unger, *supra*, endnote 6.

<sup>8</sup> A classic example is provided by the largest transfer yet to occur in Alberta from the Western Irrigation District to the M.D. of Rocky View, described below at 31. The transfer “price” consisted of the cost of constructing a pipeline which resulted in the saving of all the water transferred to Rocky View, leaving no windfall to the District.

<sup>9</sup> The approximate premium on the sale of irrigated land was derived from:

<http://www.agcanada.com/albertafarmer/2011/01/17/good-land-is-hard-to-find/>, accessed November 30, 2013.

<sup>10</sup> Henning Bjorlund, The Competition for Water: Striking a Balance among Social, Environmental and Economic Needs (C D Howe Institute Commentary No.302, April 2010) endnoteat 6.

<sup>11</sup> Jeremy Schmidt, Alternative Water Futures in Alberta (Parkland Institute, Edmonton, December 2011, endnote15.

<sup>12</sup> South Saskatchewan River Basin Plan , *supra*, endnote 3, at 14.

<sup>13</sup> Jeremy Schmidt, *supra*, endnote 11 at 12. See also Droitsch, In a generally critical study, Danielle Droitsch and Barry Robinson set out “three conditions that must be present for the efficient market system of resource allocation” in furthering the goal of ensuring a higher degree of water security in the form of secure rights and flexibility” *supra*, endnote 1, at 19.

<sup>14</sup> Julia Ko and William F. Donahue, Allocating Our Water: Changing to Meet the Public Interest (Water Matters, Canmore, Alberta, 2012)endnote, 10.

<sup>15</sup> Reed D Benson, Alive but Irrelevant: The Prior Appropriation Doctrine in Today's Western Water Law 83 U. Colo. L. Rev. 675, 706-707 (2011-2012); Derek L Turner, “Pagosa Area Water & Sanitation District v. Trout Unlimited and an Anti-Speculation Doctrine for a New Era of Water Supply Planning, 82 U. Colo. L. Rev. 639, 652 (2011).

<sup>16</sup> Nigel Bankes, Policy Proposals for Reviewing Alberta has Water (Re-) Allocation System, 20 J.E.L.P. 81, 103-104 (2010).

<sup>17</sup> See on these points the Report of the Minister’s Advisory Group, “Recommendations for Improving Alberta's Water Management and Allocation (2009) and the Alberta Water Council, Recommendations for Improving Alberta's Water Allocation Transfer System (2009), both summarized by Nigel Bankes, *supra* endnote 16, at 100-102.

<sup>18</sup> See, e.g., Danielle Droitsch and Barry Robinson, *supra* endnote 1 at 25, where the authors argue for the establishment of a water allocation and share trading system that facilitates the reallocation of water from one use to another, provided that water is first secured for people and the environment. The authors recommend transfers without prior approval, where the water transferred is applied to the same use as in the original licence. The current review system should be maintained for permanent transfers of allocations between different uses. See also, The Competition for Water: Striking a Balance among Social, Environmental and Economic Needs (C.D. Howe Institute Commentary No.302, April 2010) 4-7. 21