

Water Law in the South Saskatchewan River Basin (Alberta/Saskatchewan)

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Abstract

The South Saskatchewan River Basin ("SSRB") travels from the foothills of the Rockies in Alberta through Saskatchewan and back into southern Alberta. As a result, the water law relating to water quality and water allocation amongst competing uses is a mixture of Alberta (within the Alberta boundaries) and Saskatchewan (within the Saskatchewan boundaries) and a smattering of federal law in respect of federal lands and issues. This paper will review some of the pertinent legal rules respecting water allocation and quality in respect of the South Saskatchewan River Basin and conclude with a discussion of the most salient issues raised by this review.

Canada's water law evolves from many different sources and influences. It commenced with the riparian water laws of Britain, where laws developed on a case by case basis in a land of relative water abundance. This law was adopted in Canada but then modified by statute in respect of western Canada by firstly the Canadian government and later the provincial governments after the formation of the provinces of Alberta and Saskatchewan and the Natural Resource Transfer Agreements of 1930. In the aftermath, Alberta and Saskatchewan water law and policy has diverged, yet in some federal lands in the provinces federal water law and policy remains in tact.

Now a complex web of federal and provincial laws apply to the South Saskatchewan River Basin running through Alberta and Saskatchewan. Although the South Saskatchewan River is one continuous body of water, laws differ between Alberta and Saskatchewan. This is further complicated when laws relating both to quantity and also quality of water are examined. Although

quantity and quality of water issues are interrelated ecologically and scientifically, the laws in relation to quantity and quality have very few connections.

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History of Water Law

In British common law, water, in its natural state, was incapable of ownership at common law.¹ Traditionally water has been treated as a natural right not originating from the state but a natural right of dwellers supported by a water system, especially a river system, to use water.² As such, water was a “common property resource”. Common property resources are either incapable of ownership, like the high seas or air, or are collectively owned (and then “public property” resources) like water, or oilfields extending under several properties.³ (An exception to this common law rule is “standing water” or water on the surface of land like ponds, sloughs, or lakes, which is not flowing or navigable (joining two public points) which forms part of the land and is owned by the landowner).⁴

At common law, certain legal rights and obligations regarding the use of water and the effects of that use on others evolved. Later, water management was both legislated and/or established by agreement. Canadian water rights are

¹ Dale Gibson, “The Constitutional Context of Canadian Water Planning” (1968) 7 Alta. L. Rev. 81. (Although much of *Dale Gibson’s* work is cited as “opinion”). See also Alistair R. Lucas, *Security of Title in Canadian Water Rights*, 1990 Canadian Institute of Resource Law, U of C at page 7.

² Vandana Shiva, *Water Wars, Privatization, Pollution, and Profit*, (London: Pluto Press, 2002) at p. 20

³ Steven A. Kennett, *Managing Interjurisdictional Waters in Canada: A Constitutional Analysis* (1991, University of Calgary Press, Calgary) at page 10.

⁴ Cheshire’s *Modern Law of Real Property* (11th Ed) p.131 as quoted in Phillip G.C. Ketchum Q.C., *supra* at p. 152.

based on two common law theories, the English riparian doctrine (a set of usufructuary rights) and the American prior appropriation doctrine.⁵ The riparian doctrine was inherited from England and made part of the law of the Prairie Provinces on July 15, 1870.⁶

Riparian rights are rights that a landowner has because their land is adjacent to water. The common law riparian doctrine held that water may be used for ordinary purposes connected with the riparian land owner's property including domestic and secondary or "extraordinary" uses, notwithstanding the effects on downstream riparians.⁷ However, the water must be returned substantially undiminished in quantity and in quality.⁸ The common law riparian doctrine assumes an abundant, if not an inexhaustible, water supply such as existed in eighteenth century England. The doctrine gives surface water riparian rights holders little security in regions of low rainfall or dramatic seasonal water flow fluctuations.⁹

Riparian rights do not include the right to a specific quantity of water and are not exclusive. Ultimately they are correlative as the withdrawals of numerous riparian owners who must each return the water "substantially" undiminished may result in over-use and consequential supply shortages for lower riparian. Riparian rights are classified under six headings:

- (i) the right of access to the water;
- (ii) the right to drain surface water from adjacent land into the water;
- (iii) rights relating to the flow of water;
- (iv) rights relating to the quality of water;
- (v) rights relating to the use of water;
- (vi) the right of accretion (the increase to land bordering on a river through silting up of soil, sand or other substance).¹⁰

The rights relating to the flow of water have been placed into four categories:

- (i) to have the water flow in its natural course;

⁵ Alastair R. Lucas, *Security of Title in Canadian Water Rights* (Canadian Institute of Resources Law, 1990, Calgary), at page 4.

⁶ *Ibid.* at p. 4.

⁷ *Ibid.* at p. 5.

⁸ *Ibid.* at p. 5.

⁹ *Ibid.* at p.8.

¹⁰ Gerard V. La Forest et al, "*Water Law in Canada: The Atlantic Provinces*" (Ottawa: Information Canada, 1973), at page 201.

- (ii) to prevent the permanent extraction of water from the stream, other than for domestic purposes;
- (iii) to prevent the alteration of the flow of water to property downstream;¹¹
- (iv) to have the water leave one's land in its accustomed manner.¹²

However, riparian rights can be limited by:

- (i) the reasonable uses of upper owners of the water even if a lower riparian owner suffers appreciable injury. Reasonableness is the key to this determination and the case law contradictory whether damming water is or is not reasonable;¹³
- (ii) the acquisition of competing riparian rights by prescription. These riparian rights are acquired by the uninterrupted use of water for the period required under an Easement Act, or prescription under fiction of lost modern grant (usually twenty years) or a period in excess of the time within which an action to challenge can be brought;¹⁴
- (iii) rights of the public to navigation, to use the water course as a highway, the right to float logs and other property on both navigable and non-navigable streams, and the right to fish;¹⁵
- (iv) statutory power allowing the use of the water. The statute will be interpreted so as to interfere as little as possible with the riparian rights of others.¹⁶

Because the common law riparian doctrine couldn't meet the development needs of Canada, Canada and later the provinces, enacted statutes replicating portions of the United States' prior appropriation system.¹⁷ The principles of "prior appropriation" developed in arid western regions of the United States in

¹¹ This right is preserved as in Saskatchewan the right of a riparian owner to the use of water for domestic purposes on riparian land is maintained. Approval is needed to construct works to divert or impound water. The Saskatchewan Watershed Authority Act, 2005. S. 40 and 57 and 59(2)

¹² *Ibid.* at pages 206 to 214.

¹³ *Ibid.* discussing the cases of *Keith v. Corry* (1877), 17 N.B.R. 400 and *Brown v. Bathurst Electric and Water Power Co.* (1907), 3 N.B. Eq. 543.

¹⁴ Gerard V. La Forest et al., *Water Law in Canada: The Atlantic Provinces*, *supra* at page 217 and Alistair R. Lucas, *Water Title* at p.6. The current Saskatchewan legislation specifically prevents the acquisition of water rights by prescription or length of use.

¹⁵ Kenneth J. Tyler, "Indian Resource and Water Rights" [1982] 4 C.N.L.R.1, at pages 15-19.

¹⁶ Gerard V. La Forest et al., *Water Law in Canada: The Atlantic Provinces*, *supra* at page 217

¹⁷ Kenneth J. Tyler, *supra* page 4. The Canadian statutes differ from the law of the United States in that there, the first user automatically obtains an enforceable water right. Subsequent users take subject to this use; there is no license requirement as in Canada for these priorities. Riparian doctrine couldn't meet the development needs of the west as water use was restricted to riparian land which inhibited the development of other land, consumptive uses (like large scale irrigation) were denied to riparian owners, and no scheme of prioritization of interests existed. In dry years there would be no apportion of water to its most important uses. An upstream riparian would have an advantage. David R. Percy, "water Rights in Alberta" [1977] XV Alta L.Rev. 142

order to meet gold miners' water claims to small sporadic streams on arid public lands.¹⁸ To meet this need American judges rejected the riparian doctrine and established a "first come, first right" doctrine.¹⁹ The right to the beneficial use of the flow is a usufructuary right only (which means it is a temporary right to use, without damaging).²⁰ A version of this doctrine was codified in statute and formed the basis for Canada's statutory water law systems.²¹

Common law riparian doctrine remains relevant in Canada to the extent it has not been clearly modified or abolished by statute and to the extent the courts find it applicable in the Prairie Provinces.²² Prior to the creation of the Prairie Provinces, the federal Government attempted to pass statutes that removed or at least restricted riparian rights by vesting the authority in the Crown to allocate water rights.²³

The *North-West Irrigation Act*²⁴ in 1894 granted the federal Crown control of water and the ability to grant rights to others by way of license. S. 5 disallowed any Crown divestiture of water rights except in pursuance of an agreement or undertaking existing in 1894. The language specifically in s. 4 provided:

...Until the contrary is proved, the right to the use of all water at any time in any river, stream, watercourse, lake, creek, ravine, canon, lagoon, swamp, marsh or other body of water shall, for the purposes of this Act, in every case be deemed to be vested in the Crown; and, save in the exercise of any legal right existing at the time of such diversion or use, no person shall divert or use any water from any river, stream, watercourse,

¹⁸ *Ibid.* at p. 11.

¹⁹ *Ibid.* at p. 11.

²⁰ *Ibid.* at p. 12.

²¹ *Ibid.* at p. 13. The societal objectives of Canada's water law system is: 1. the maximization of the value of the resource; 2. protection and promotion of public water uses; 3. clear ordering of private water rights; 4. fairness, flexibility, and efficiency in water rights allocation and management. *Ibid.* at p.14.

²² For example the English common law rule allotting the bed of the river *ad medium filum aquae* – to the centre thread of the stream to the riparian owners on either side for non-tidal water has been found inapplicable for navigable rivers in western Canada as the local circumstances in Canada were very different than Britain. *R. v. Nikal* [1996] 5 W.W.R. 305 (S.C.C.) and *R. v. Lewis* [1996] 5 W.W.R. 348 (S.C.C.). *King v. Fares* (1932) S.C.R. 78

²³ Alastair R. Lucas, *Security of Title in Canadian Water Rights*, *supra* at p.15 and Percy David R., "Water Rights in Alberta" (1977) XV Alta. L. Rev. 142. This intention appears in *The North-West Irrigation Act*, S.C. 1894, and c.30 and was repeated in early provincial legislation of the prairie provinces. The continued existence of riparian rights has been controversial and Legislatures have amended statutes attempting to clarify the intention to abolish riparian rights by vesting water rights in the Crown. Academic commentary questions whether the vesting of the ownership in water was effective. See *Gibson, supra*, at page 73 and *Landis, Legal Controls of Pollution in the Great Lakes Space* (1970) 48 Cn. Bar. Rev. 93 at page 102. Gibson recognized that water could be owned once it was reduced to possession. The common law notion was the concept of owning water was meaningless because no particular rights or interests could possibly be grounded upon this "ownership".

²⁴ S.C. 1894, c. 30 (instead of first right of use as in the United States). This is consistent as well with the *Territories Real Property Act*, S.C. 1886, c.51. In B.C. similar provisions were made in the Land Ordinance, 1865, the *Water Privileges Act*, 1892, S.C. 1894, c.30.

lake, creek, ravine, canon, lagoon, swamp, marsh or other body of water, otherwise than under the provisions of this Act.

Any water, the property of which was vested in the Crown, could be acquired through application for domestic, irrigation, or other purposes. Any pre-existing holders of rights had 12 months in which to obtain a license or authorization or their right was forfeit. This denied landholders any property interest, right or privilege respecting the use of any water²⁵ but their riparian right to supply for domestic purposes was specifically preserved.

The *North-west Irrigation Act* radically altered the common law by declaring that the property right to use all water was vested in the Crown which was expanded one year later to the “ownership of all water” as well as the right to its use.²⁶ The Act also introduced a statutory scheme of allocation of water resources. It is questionable if governments are able to legitimately appropriate something which cannot be owned in common law and something for which an arguable natural right of access to exists for persons. There have been no successful challenges to the current statutory regime which has been in existence for over 100 years on this basis. The *Irrigation Act* was a modified version of the United States’ first use, first right scheme by allowing the Crown the exclusive domain of water allocation. This legislation responded to the need for large irrigation projects after years of drought on the Prairies.

The *North-west Irrigation Act* granted rights to water on a first-come, first served basis.²⁷ A license was required for the existence of a right with priority based on application date, which differed from the American model where water rights and priority were determined by the date the water was first beneficially used.²⁸ This scheme arguably created problems in times of water shortages. Prior appropriation favours consumptive use and can result in exhaustion of the entire flow of water without leaving enough in stream flow to protect the natural functioning of the watercourse and to safeguard environmental values. It is also very difficult to accommodate new users once all water has been allocated without the transfer of water rights and no incentive is created for water conservation.

²⁵ Shore is defined as that part of the bed which is uncovered when the water is low. *Flewelling v. Johnston* (1921) 59 D.L.R. 419 (Alta C.A.) at 428. However, the term properly applies only to the sea or other tidal waters. With reference to a lake it means prima facie the land adjacent to the water such that the owner’s property would extend to the water’s edge or lowest watermark. *Burke v. Niles* (1870), 13 N.B.R. 166 (N.B.C.A.) Depending on the situation, in the Prairie Provinces there may not be a “shore”.

²⁶ This was the initial language in 1895 which was supplemented by An Act to amend the North-west Irrigation Act, S.C. 1895, c.33, s.2. This would appear to change water from a common property resource incapable of ownership or collectively owned to a managed resource.

²⁷ This was similar to the Water Privileges Act of 1892 of British Columbia but actually was modeled after laws in a number of western states of the United States and Australia. David R. Percy, *The Framework of Water rights Legislation in Canada* (1988, The Canadian Institute of Resources Law, Calgary) at p. 7.

²⁸ *Ibid* at p. 14.

In 1920 the federal government assumed the power to reserve unallocated water in order to facilitate new uses when water had been fully allocated in a basin. This reserved water could then be allocated in the public interest, according to the discretion of and in the order of priority set by the Lieutenant Governor. This was repeated in subsequent provincial legislation.²⁹

The 1920 amendments also provided for a statutory table of preferential uses. These gave the highest priority to the use of water for domestic purposes, followed in order by uses for municipal, industrial, irrigation, and other purposes. These schemes were also repeated with minor modifications by the prairie provinces.³⁰ These legislative schemes permitted a person to apply to the Minister to cancel a license of inferior purpose and attain the priority of the license canceled, if successful. The cancelled license holder would be entitled to compensation.

When the provinces of Manitoba (1870), Alberta and Saskatchewan (1905) were created the natural resources were retained by the Dominion Government which included water rights.³¹ In 1930 these natural resources were transferred to the provinces in the Natural Resources Transfer Agreements and water was confirmed as part of the transfer in Agreements of 1938.³²

Four main features of the original federal water law were as follows:

- (i) Crown Ownership;
- (ii) Allocation of Water by License;
- (iii) Prior Allocation Principle;
- (iv) Non-transferability of water rights.

The first three of these principles still survive in both Alberta and Saskatchewan, and the last in just Saskatchewan. Because of the prairie provinces agricultural development mandate, in order to encourage agricultural settlement, water rights were secured on a first-come, first-served basis for a modest fee, and regarded as permanent in nature.³³

Saskatchewan Water Allocation Law

Current Law

²⁹ Irrigation Act, S.C. 1920, c.55, s.5, Percy, *ibid* at p. 16.

³⁰ An Act to amend the Irrigation Act, S.C. 1920, c.55, s.4.

³¹ *Ibid.*, at p.9.

³² *ibid.* at p. 11 referring to The Natural Resources Transfer (Amendment) Act, 1938, S.C. 1938, c.36.

³³ Percy, David, "The Limits of Western Canadian Water Allocation Law" (2004) *J. Env. L. & Prac.* 315 at 314.

Saskatchewan's water law consists predominantly of *The Saskatchewan Watershed Authority Act*³⁴ and *The Water Appeal Board Act*³⁵. This 2005 Act incorporated ground water conservation legislation.

The Act establishes the corporation, the Saskatchewan Watershed Authority, and establishes its powers, mandate, and rules for administration. Saskatchewan moved to the Crown corporation model in 1984 with *The Water Corporation Act*³⁶ which changed the Saskatchewan water rights scheme from a legislated water rights scheme contained in *The Water Rights Act*³⁷ to a water rights model managed by a Crown Corporation. Issues formerly dealt with by legislation were then left to be resolved at the discretion of officials of the then Water Corporation (and now Saskatchewan Watershed Authority).

The Saskatchewan Watershed Authority's mandate and purpose are to manage, develop, control and protect water, watersheds and related land, promote economical and efficient use, distribution, conservation of Saskatchewan's water resource, maintain and enhance quality and availability of Saskatchewan's water resource, and to conserve. research and coordinate Saskatchewan's water resource. The Saskatchewan Watershed Authority is given specific powers to regulate and control flow of waters, receive and consider application for water license and water works, collect data on quality, quantity, source use, cost and other aspects of water and to coordinate, develop and promote policies and programs relating to planning, development and use of inter-provincial and international waters, amongst others.³⁸ The Saskatchewan Watershed Authority also approves the building of and water works such as dams, breakwaters, or reservoirs.³⁹

The *Irrigation Act, 1996*⁴⁰ provides for the establishment or irrigation districts within Saskatchewan and their governance and dissolution.

Ownership of Water

The Act specifies Crown ownership of the property in and use of water which has been a feature of Canadian legislation since the original federal *North-west Irrigation Act*. The Act applies to groundwater as well as surface water and prohibits the transfer of any water out of a watershed.⁴¹

³⁴ 2005, S.S. 2005, S-35.03

³⁵ S.S. 2002, c.S-35.02

³⁶ S.S. 1983-84, C.W-4.1, s.42

³⁷ R.S.S. 1978, c. W-8

³⁸ See ss.5 and 6 of *The Saskatchewan Watershed Authority Act, 2005*. Land owners accessing groundwater on their land for domestic purposes do not require license pursuant to the Act.

³⁹ s. 59 *The Saskatchewan Watershed Authority Act, 2005*

⁴⁰ S.S. 1996, c. I-14.1.

⁴¹ s. 57(3) and s. 55 of *The Saskatchewan Watershed Authority Act, 2005*. However, a transfer or taking of water between watersheds within Saskatchewan is acceptable in s. 55(2).

Licensed Water Rights

The Act grants the corporation the ability to issue a water license for a period of time and on terms and conditions it considers appropriate. Specifically excepted from the water rights license is any water allocated for the use of any other person or withdrawn from allocation by order of the Minister.⁴² A license may be refused, but the reasons for such refusal do not appear in the legislation.

Factors for the cancellation, amendment and suspension of a license by the corporation are:

- (i) agreement of the licensee;
- (ii) Failure to comply with terms or conditions of a license;
- (iii) Usage of the water for a purpose other than that specified on the license;
- (iv) The Corporation considers the holder of the license no longer requiring the right;
- (v) Contravention of any provision of the act, regulations or order;
- (vi) Default in payment of monies;
- (vii) With approval of the Lieutenant Governor in Council, if the corporation considers it to be in the public interest (with payment of compensation of the actual value at the time of cancellation of the works).

Priority of Interests

This is a change in policy from the previous western model of first come first served. The corporation's discretion is only fettered by limitations implied in the Act, in specific licenses granted, and general principles of administrative law. The wording of the section allows the corporation to cancel the right to use of any water granted by the corporation. Some argue these are interests granted by the current Saskatchewan Watershed Authority and its predecessor, SaskWater and this does not appear to include any rights to use water granted prior to the creation of SaskWater, or 1984.⁴³ However, this may not be a justifiable position as in order to "operate" any water works the written approval of the corporation is required.⁴⁴ The Act envisions that all water works have been authorized by the corporation, and as a result could, therefore, be cancelled. There doesn't appear to be an effective grandfathered set of water licenses prior to 1984.⁴⁵ The right, privilege or authority granted to any person pursuant to any Act or

⁴² (being that member of the Executive Council assigned the administration of the Act)s.50(1) of *The Saskatchewan Watershed Authority Act, 2005*

⁴³ Percy, *supra*, "The Limits of Western Canadian Water Allocation Law."

⁴⁴ s. 59 of the *Saskatchewan Watershed Authority Act, 2005* and s. 50 of the *Saskatchewan Watershed Authority Act*.

⁴⁵ This would mean upon the creation in 1984 of SaskWater all license would have been reviewed and reissued by the corporation. Further research to confirm this should be conducted.

former Act (including federal Acts) are preserved unless amended, cancelled or suspended pursuant to the current Act.⁴⁶ Thus there is preservation of prior interests, but not necessarily priority.

Many large prairie water license were originally granted before 1930 by the federal government so it will be with some difficulty that provincial legislation will be able to affect these licenses.⁴⁷ However, their terms and conditions of renewal (if any) would need to be assessed to ascertain the validity of any argument of priority.

As there isn't a statutory scheme of water rights it is unclear what the priority of water rights will be in the event of a conflict. It would appear to be left to the discretion of officials at the corporation. Historically, priority would have been allocated on a first in time basis depending on administrative discretion and type of use. Those with the first water license would have been entitled to priority over any license granted after their license. The order of precedence was domestic purposes, municipal purposes, industrial purposes, irrigation purposes, other like purposes, mineral water purposes and mineral recovery purposes.⁴⁸ However, in the statutory scheme prior to 1984 a specific type of use would have been determined and priority granted based on type of water license. The current Act, unlike that of Alberta, makes no provision for priority of water license or types of use.

It may be that it is extremely rare and unusual to find cases in which water licenses are not renewed or in which the powers of cancellation in (vii) above are exercised.⁴⁹ It has yet to be seen how this power will be exercised, and if it will be exercised in a manner acceptable to parties involved during times of water shortage. Significant unrest may occur if licensees view their license as "entitlements" and "sacrosanct." Any attempt to remove or limit these water rights may be met with a degree of outrage making it difficult or impossible to exercise the statutory powers.⁵⁰ If this is the case, this power will provide little flexibility in managing water in times of shortage.

Dispute Resolution

The Act contains a detailed mechanism to appeal decision of the Corporation for cancellations and refusals including requirements of notice of decisions by the corporation an opportunities for submissions.⁵¹ The Act contains a provision for informal and formal complaints in respect of other

⁴⁶ S. 41 of *The Saskatchewan Watershed Authority Act, 2005, supra*.

⁴⁷ Percy, David, "The Limits of Western Canadian Water Allocation Law", *supra*

⁴⁸ S. 14 of R.S.S. 1953, c. 48 and Gisvold, Per, *A Survey of the Law of Water in Alberta, Saskatchewan and Manitoba* (1956: Prairie Farm Rehabilitation Administration and Economics Division, Canada Department of Agriculture,) at p. 29.

⁴⁹ Percy, David, "The Limits of Western Canadian Water Allocation Law, *supra*

⁵⁰ Percy, David, "The Limits of Western Canadian Water Allocation Law", *supra*

⁵¹ s.53, 54, 69 of *The Saskatchewan Watershed Authority Act, 2005*

person's actions taken in relation to water pursuant to the Act which ultimately can be appealed by aggrieved parties to the Water Appeal Board and then the Court of Queen's Bench.⁵²

The Act does not contain principles to be followed in the resolution of such disputes and complaints. Again these disputes presumably are decided bureaucratically without statutory guidelines. This results in a lack of certainty and potential for arbitrariness.⁵³

Transfers

Transfers of water outside a watershed are not allowed (unless within Saskatchewan or packaged at a capacity of less than a prescribed capacity or for such things as transporting animals).⁵⁴

No provision is made for transfer of water rights to new uses. The water rights system allowing re-distribution of water rights from lower to higher priority uses has been abolished. Effectively the corporation would have to cancel a license using the means in (vii) above and issue a license to a new applicant.

The Act sets out a method of complaints respecting drainage works, appeals of decisions by the corporation (to the Water Appeal Board) and enforcement and penalties.

Local Advisory Committees

One or more advisory committees may be appointed by the Saskatchewan Watershed Authority for a specific period and specific purpose but if the period is longer than one year the approval of the Lieutenant Governor in Council is required.⁵⁵ These committees can be for the purposes of advising on any of the activities of the corporation. There is no legal requirement that the corporation follow the committees' advice.

Alberta Water Allocation Law

Current Law

The *North-west Irrigation Act* legislative scheme, for the most part, was replicated in the *Alberta Water Resources Act* of 1931. This legislation allowed license for consumptive purposes with priority based on date of application and a statutory list of preferences. These preferences ranked from domestic purposes,

⁵² s.83

⁵³ David Percy suggest this state is "unprecedented" in modern water law in North America. See "Water Rights Law and Water Shortages in Western Canada" (1986) 11(2) Can. Water Res. J. 14 at 19-20.

⁵⁴ s.55 and 56 of *The Saskatchewan Watershed Authority Act, 2005*

⁵⁵ s. 19, *The Saskatchewan Watershed Authority Act*

municipal, irrigation, industrial to lastly, water power. Transfers were allowed only if the land associated with the license was transferred or by exceptions made by the Lieutenant Governor in Council. Regulations in Alberta provided the relative precedence of various uses of water where no recorded priority of water license existed or when an extreme shortage existed. Some licenses contained provisions altering statutory priorities.⁵⁶

The title to the bed and shores of water was stated to reside with the Crown. The right to use water for domestic purposes (household requirements, sanitation, fire prevention, watering animals and poultry and irrigation of a garden less than one acre) was protected without the requirement of a license.

Irrigation systems could originally be constructed pursuant to the Irrigation Ordinance passed by the North West Territories in Regina in 1894 and license would be obtained through the North-west Irrigation Act. The Irrigation Districts Act, 1915 allowed water user districts. Alberta legislation was consolidated in *The Irrigation Act* in 1968.⁵⁷ Each district is run by a Board of Governors and subject to the supervision of a provincially appointed Irrigation Council. The Board of Governors regulates by by-law the supply and distribution of water to water users and conditions of supply. The Irrigation district would then apply for and hold a license pursuant to *The Water Act*.

This Alberta water legislation was assessed as not fulfilling the mandate of “most beneficial use of water” as priorities were determined by date of application in priority such that there was no guarantee the most economically beneficial mixture of water uses would occur. The restriction in transferring water rights was felt to be inadequate for ensuring new beneficial uses of water could be facilitated. The scheme of water rights was concluded as a hurdle to the development of the Athabasca tar sands which would require significant water extraction.⁵⁸

In 1996 a new *Water Act*⁵⁹ was passed which signified a change in policy direction for Alberta. The most significant change dealt with the ability to transfer water licenses which will be discussed under the heading Transfer below. The current version of Alberta Statute dealing with this issue is *The Water Act*⁶⁰ of 2000 which is overseen by Alberta Environment who also oversees *The Environment Protection and Enhancement Act*. The act applies to both ground

⁵⁶ Alta. Regs. 91/58, 198/65. and s. 13 allowed the Lieutenant Governor to allocate water use in a declared emergency. Alberta Licence Number 2158, 20 December 1985, issued to the provincial Crown and the Wagner Natural Area Society as quoted in Percy, “The Limits of Western Canadian Water Allocation Law, *supra* at p. 15.

⁵⁷ S.A. 1968, C.49.

⁵⁸ Percy, “The Limits of Western Canadian Water Allocation Law, *supra*.

⁵⁹ *The Water Act*, S.A., 1996, c. W-3.5.

⁶⁰ R.S.A. 2000, W-3

water and surface water. Alberta has a long history of water allocation law given its development history, dependence on irrigation, and oilfield industry (which affects water quality and supply). Its legislation provides more detail and consequently guidance on license issues, renewals and priorities than Saskatchewan's. This doesn't allow a conclusion that similar situations in Alberta or Saskatchewan may not be resolved in the same manner.

The Minister of Environment responsible for the *Water Act* then designates a "Director" pursuant to the Act who has responsibilities outlined in the Act such as for developing water management plans (as directed by the Minister)⁶¹ establishing water conservation objectives,⁶² issuing approvals for any activity affecting water,⁶³ issuing licenses for diverting or operating water works,⁶⁴ and taking enforcement measures removing unauthorized works or effecting priorities pursuant to the Act.⁶⁵

The Minister may construct, operate, maintain etc. water works when in the public interest.⁶⁶

Ownership of Water

The current Alberta legislation continues the principle that the property in and right to the diversion and use of all water is vested in the Crown.⁶⁷

Licensed Water Rights

The *Water Act* includes ground water in addition to surface water and establishes four classes of water rights: existing licenses, household users, traditional agricultural users, and new licenses. A license can be refused to protect in stream flows and if specific projects impair water quality they must be referred to the *Environmental Protection and Enhancement Act*. Licenses can be unilaterally amended if they have an adverse effect on human health or safety and suspended in the event of an emergency by Cabinet.⁶⁸ Licenses have a specific term and can only be denied renewal for an articulated public policy reason (i.e. decline of a river). Further examples would be when the license is inconsistent with an approved water management plan, the water conservation

⁶¹ s. 9(1) of the *Water Act*.

⁶² S.15 of the *Water Act*.

⁶³ S. 38 of the *Water Act*.

⁶⁴ S.48 of the *Water Act*.

⁶⁵ Part 7, Remedial Measures of the *Water Act*.

⁶⁶ S.84 of *The Water Act, supra*.

⁶⁷ S.3 of the *Water Act*.

⁶⁸ s.54(1)(v), s. 107 of the *Water Act*.

objective of a natural water body is not met, or the renewal would cause a significant adverse effect on the aquatic environment.⁶⁹

Licenses issued are specifically appurtenant to land or undertaking specified in the license and run with the land or undertaking upon any disposition unless Cabinet orders otherwise.⁷⁰

Dispute Resolution

If two or more persons are unable to resolve a complaint or dispute, they may request the Director review the matter.⁷¹ The matter may, by agreement of the parties, be sent for mediation. The Director may make a water management order in the event the Director is of the opinion it is required for various reasons such as remedying an adverse effect on the aquatic environment, human health, property or public safety, drilling is causing an adverse effect on groundwater, or if the diversion of water should be suspended.⁷² An inspector may issue a water management order.⁷³ Compensation is payable in the amount the Director considers appropriate.⁷⁴

Disputes in respect of the priority order in which water may be diverted are administered by the Director. Appeals of decisions of the Director can be made to the Environmental Appeals Board.⁷⁵

Transfers

Transfer of water rights is allowed if in accordance with an approved water management plan, and in the absence of such a plan, Cabinet order. Applications for transfer must be made to the Director and will only be allowed if these two conditions are met and the license is in good standing.⁷⁶ Further restrictions on transfer are that there is no significant adverse effect on the aquatic environment or the rights of others (agreements in writing from the other users are required if their rights are affected). The proposed transfer will be reviewed and considerations such as existing, potential or cumulative effects on the aquatic environment or any applicable water conservation objective,

⁶⁹ S.60 and s. 1(1)(h) and 9(1)® of *The Water Act, supra*. Aquatic means the components of the earth related to, living in or located in or on water or the beds or shores of a water body including but not limited to all organic and inorganic matter and living organisms and their habitat, including fish habitat and their interacting natural systems; environment means the components of the earth and includes air, land and water, all layers of the atmosphere, and all organic and inorganic matter and living organisms and the interacting natural systems that include components referred to.

⁷⁰ S. 58 of *The Water Act, supra*

⁷¹ S.94 of *The Water Act, supra*.

⁷² S. 97 of *The Water Act, supra*.

⁷³ S.32 of *The Water Act, supra*

⁷⁴ S.158 of *The Water Act, supra*.

⁷⁵ Part 9 of *The Water Act, supra*.

⁷⁶ S.81 of *The Water Act, supra*

hydraulic, hydrological and hydro geological effects, effects on other users and licensees, public safety and any other matters may be taken into account. The application may be referred for comment to other agencies and will require public notice and public review as appropriate.⁷⁷ If in the public interest in order to protect the aquatic environment or implement a water conservation objective, 10% of the allocation of water under a license being transferred can be withheld.⁷⁸

In the South Saskatchewan River Basin there is a South Saskatchewan Basin Water Management plan which allows the Director to consider applications to transfer water allocations within the basin. This is described as creating a non-regulatory method of reducing wasteful use by creating an incentive to save water and transfer its marginal value for compensation.⁷⁹

The statutory provisions allowing transfer are touted by some researchers and the Alberta government as advancing the goals of efficient allocation of water interests and conservation in incenting the transfer of surplus interests. Some analysis of whether the addition of this economic initiative into water licensing is having these desired effects would be useful. Has this market tool captured the community value of water and facilitated both political and ethical considerations? It is unclear that there is a substantial market which would allow an efficient exchange of water interests in this transfer process.

Priority of Interests

There are four types of water rights: existing licenses, household users, exempted agricultural users, traditional agricultural users and new licenses.⁸⁰ Licensees and traditional agriculture users have priority amongst themselves according to the priority number assigned to their license or registration (generally the date of filing). Household users have priority over diversions pursuant to approval, license or registration. However, this priority is subject to the Director making a water management order if the household diversion has a significant adverse effect on the aquatic environment or on a licensee or traditional agriculture user.⁸¹ The Act also contains factors for the granting or refusing a license, resolution of disputes, enforcement of orders, offences and penalties, and water conservation holdbacks.

Old water licenses are explicitly grand parented in the legislation and are explicitly not subject to any provisions in the *Water Act* which are inconsistent

⁷⁷ These are not part of the legislation but posted by Alberta Environment on their web site.

www.gov.ab.ca/env/water

⁷⁸ S.83 of *The Water Act*, *supra*.

⁷⁹ Percy, David, "The Limits of Western Canadian Water Allocation Law", *supra*.

⁸⁰ Part 3 of the *Water Act*, *supra*.

⁸¹ s. 23 and 27 of the *Water Act*.

with the term or condition of the grand parented license.⁸² However, these licenses can be subject to a holdback of license allocation in order to return water to in stream needs. This, however, is a voluntary mechanism.

Alberta has effectively maintained the historical interests and power relations embodied in its water resource management. If at the time of grandfathering, in 1996, all water was allocated in the SSRB, the ability of the Minister of the Environment to change license allocations or make orders for the protection of the environment is very limited.

Saskatchewan Water Quality Law

There continues to be a lack of comprehensive approach to managing water quality in Saskatchewan. Although the Minister of the Environment and thus the Department of Environment and Resource Management (SERM) has responsibility for water quality through *The Environmental Management and Protection Act, 2002*⁸³ ("EMPA") and *Water Regulations*⁸⁴ in respect of tap, ground and surface water, "effective" management resides with several departments and Ministers.

The Minister of the Environment has responsibility for all matters not by law assigned to any other minister or government agency respecting the environment and enhancing and protecting the quality of the environment including coordinating policies and programs of government agencies respecting the management, protection and use of the environment. Although this duty of enhancement and protecting appears very notable, s. 78 of the EMPA provides immunity from any liability for failure to carry out this function or duty (along with any other action committed or omitted in the course of fulfilling the duties within the EMPA).

EMPA has provisions prohibiting pollution and discharges and has responsibility for the collection, processing and storage of data on water quality. Source protection of water largely takes place under the auspices of this act. It prohibits certain activities and licenses those that otherwise would be in violation of the Act. In actuality, through exemptions and the ability of other departments to license industrial developments it would appear SERM has the effective obligation of water quality management without the effective tools.⁸⁵ This conclusion is supported by two main observations:

⁸² s. 18(2) of *The Water Act* and see Bankes, Nigel, "Water Law Reform in Alberta: Paying Obeisance to the "Lords of Yesterday" or Creating a Water Charter for the Future?" (1995) 49 Resources 1, which argues these license are not subject to environmental restrictions.

⁸³ S.S. 2002, c. - E 10.21.

⁸⁴ *The Water Regulations*, 2002 E-10.21 Reg 1.

⁸⁵ S. 4 of EMPA prohibits a discharge of a contaminant, and s. 35 prohibits discharges into water without a permit but there are numerous exemptions from these requirements.

- (1) The Saskatchewan Watershed Authority has responsibility for water quality and conducts tests of water quality along various points of Saskatchewan's rivers and water bodies. However, it is SERM, not the Saskatchewan Watershed Authority, who has the authority to issue environmental protection orders prohibiting certain actions causing an adverse effect on the environment (including water quality). It would be incredulous to expect SERM to do so when the Saskatchewan Watershed Authority was in possession of the most relevant information.
- (2) Agricultural operations and oil and gas wells are exempted from the provisions of EMPA requiring licensing by the Minister of Environment for discharges of pollutants including those into water. These activities are licensed by the Ministers responsible for agricultural or oil and gas activities.

Potable Water

Two acts appear to impose obligations respecting potable water. A municipality has an obligation to provide potable water to its population. Section 20 of EMPA specifically provides under the title of "duty to provide safe drinking water" that no person responsible for a waterworks that is used to provide water intended for human consumption shall fail to ensure that the water supplied is safe for human consumption.⁸⁶ S. 14 of *The Public Health Act, 1994*⁸⁷ obligates municipalities, rural municipalities in which a hamlet or a town is located or a northern village or hamlet within the meaning of *The Northern Municipalities Act* to provide potable water. S. 15 of *The Public Health Act, 1994* prohibits any person making available to the public water which is not potable unless the public is clearly advised that it is not potable and of the uses which water may safely be put.⁸⁸

Although it may appear advantageous to have obligations outlined in two acts, it may become confusing to determine which Minister should be enforcing these obligations.⁸⁹ EMPA clearly states that the Minister of the Environment is responsible except where matters are not by law assigned to another Minister. Although the Minister of Health enforces *The Public Health Act, 1994* obligating municipalities to provide potable water, all aspects of drinking water works and

⁸⁶ Waterworks are exempted in s. 20(2) if users have been clearly advised the water is not safe for human consumption and the waterworks only supply certain prescribed purposes. *The Water Regulations, 2002* pursuant to EMPA

⁸⁷ R.S.S., c. P-37.1.

⁸⁸ S.S. Regulations may exempt persons from s.15.

⁸⁹ Historically it appears that Saskatchewan Health regulated semi-public waterworks with a flow of less than 18,000 litres per day which included on-site water systems serving restaurants, motels, campgrounds, small parks and municipal wells with no distribution system. Saskatchewan environment regulated all municipal and privately owned (publicly accessible) waterworks with a flow rate of 18,000 litres or more per day.

sewage works are administered by the Minister of the Environment. These inconsistent obligations may not doubly ensure water quality as perhaps intended, but end up creating ripe grounds of administrative misadventure.

Suppliers of water for “hygienic use” must comply with the requirements set by regulation regarding disinfection.⁹⁰ The Minister of Environment may adopt all or any part of the Guidelines for Canadian Drinking Water Quality, Sixth Edition, Health Canada, 1996. It is unclear if the Minister of Environment has adopted any of these Guidelines. The regulations appear to set quality guidelines for waterworks constructed commissioned or altered after the coming into force of the regulations in accordance with standards set out in the regulation table.⁹¹ A detailed comparison of the provisions in the Appendix in the Water Regulations and the Canadian Guidelines would need to be undertaken to measure the standard of water quality adopted by Saskatchewan.

Existing waterworks operators appear to have a more limited set of standards they are required to meet in respect of coliform, fecal coliform and bacteria levels.⁹² A detailed comparison of this to the Canadian Guidelines mentioned previously would be required for a complete assessment of these provisions. The regulations have detailed requirements for water turbidity and chemical standards. Any permittee of waterworks after the regulations came into force has the requirements of existing waterworks operators, plus must meet the standards set out in the Appendix to the regulations.⁹³ It would appear that existing waterworks operators have received a certain “grandfathered” ability to provide lesser quality water than new permittees of waterworks.

Any upset condition in the testing or operation of the waterworks must be immediately reported to the Minister of Environment along with any anticipated upset condition, bypass condition or event affecting a waterwork which could adversely affect the quality of water.⁹⁴ Every permittee must take water samples regularly and submit them to an accredited laboratory. Certain notification requirements exist to the Minister of the Environment of the test results.⁹⁵ The Municipal Drinking Water Quality Monitoring Guidelines, EPB 202, issued by the department dated November, 2002 are adopted by Saskatchewan.⁹⁶ These would appear to be monitoring guidelines, not actual quality guidelines.

An independent engineering assessment respecting the waterworks must be conducted at least once every five years and the findings reported to the minister.⁹⁷ Every permittee of waterworks must have an approved written quality

⁹⁰ S.29(4) of *The Water Regulations*, 2002 E-10.21 Reg 1.

⁹¹ See regulation 31 and subsequent in *The Water Regulations*, 2002 E-10.21 Reg 1.

⁹² S.32 of *The Water Regulations*, 2002 E-10.21 Reg 1.

⁹³ S.31(1) of *The Water Regulations*, 2002 E-10.21 Reg 1.

⁹⁴ S.37 of *The Water Regulations*, 2002 E-10.21 Reg 1.

⁹⁵ S.39 of *The Water Regulations*, 2002 E-10.21 Reg 1.

⁹⁶ S.5 of *The Water Regulations*, 2002 E-10.21 Reg 1.

⁹⁷ S. 35 of *The Water Regulations*, 2002 E-10.21 Reg 1.

assurance and quality control policy and notify its consumers every year of quality of water and its compliance with sample submission requirements.⁹⁸

The Minister of the Environment may issue an emergency environmental protection order directing a person to take necessary action if of the opinion that person is carrying out any activity causing immediate or significant adverse effect. If the person against whom the order is directed fails to comply the Minister may take the necessary action and then recover costs and expenses.⁹⁹

Failing to comply with an order of the Minister or comply with the provisions of the Act or regulations may result in a charge and a fine not exceeding one million dollars and imprisonment not exceeding three years or both. Directors and officers or agents of a corporation who has committed such an offence are also liable.¹⁰⁰

Agricultural or industrial development which may have an affect on water quality is licensed pursuant to *The Agricultural Operations Act*,¹⁰¹ or perhaps *The Oil and Gas Conservation Act*.¹⁰² These licensed activities are then exempted from permitting as discharges into water and alterations to water bodies by the Minister of the Environment.¹⁰³ There are approximately another dozen acts and regulations affecting water quality such as *The Shore land Pollution Control Regulations*, *Sanitation Regulations*, *Pollution of Water (Prevention) Act*, and *Pest Control Products (Saskatchewan) Act*.

The management of water works and infrastructure resides with the Saskatchewan Watershed Authority. It has responsibility for managing, administering, developing, controlling and protecting water and related land resources, maintaining and enhancing quality.¹⁰⁴ The Minister of Municipal Affairs and Housing administers this Act. Once again this duplication of responsibility with that of the Minister of the Environment in EMPA may be cause for concern. More specifically, any water works (such as dams, weirs, floodgates, drains, reservoirs, culverts, etc) must receive approval from the Saskatchewan Watershed Authority. If the Saskatchewan Watershed Authority is of the opinion that the proposed work may impair the environment or have an impact on natural resource, the corporation may forward a copy of the application to the Minister of the Environment.¹⁰⁵ There is no further obligation to have the Minister of the Environment's approval prior to authorizing a water work. This

⁹⁸ Ss. 43, 44 of *The Water Regulations*, 2002 E-10.21 Reg 1

⁹⁹ SS. 46-53 of EMPA.

¹⁰⁰ S. 74 EMPA.

¹⁰¹ S.S. 1995, c. A-12.1. S. 21 of that Act provides a license for an operation can't be granted unless the Minister is satisfied there will be no pollution of ground or surface water.

¹⁰² R.S.S. 1978, c. O-2.

¹⁰³ S.6 of *The Water Regulations*, 2002 E-10.21 Reg 1

¹⁰⁴ s.161© *Water Corporation Act* and now s. 5 of *The Saskatchewan Watershed Authority Act*, 2005.

¹⁰⁵ S. 61(2) of *The Saskatchewan Watershed Authority Act*, 2005, *supra*.

notification provisions appears to again cloud the issue of which Minister is responsible for water quality.

Section 21 of EMPA requires any waterworks (for human consumption) or sewage works to obtain a permit from the Minister of the Environment unless exempted. There are no requirements in the regulations for construction of water works to be out of safe materials. Although the minister has adopted a Guide to Waterworks Design, EPB 201 issued by the department dated November, 2002,¹⁰⁶ it is unclear if safe materials would be a requirement enforced on a permittee through conditions of the permit.¹⁰⁷

Even after the recommendations of the North Battleford Inquiry¹⁰⁸, water quality remains managed in a fragmented way. A comprehensive water strategy with monitoring is required.¹⁰⁹

Source Water Protection

There is very little specific legislation or government action taking the most important step in water quality protection, protecting water sources. Only a handful of municipalities (not in Saskatchewan or Alberta) have taken steps to purchase land forming their community's watershed.¹¹⁰

The Minister of the Environment, pursuant to the EMPA may issue an emergency environmental protection order if they are of the opinion that a person is doing something causing an adverse effect on the environment (which includes water).¹¹¹ The Minister of the Environment may also issue a waterworks protection order against a person responsible for a waterworks or sewage works if necessary to protect human health or the environment.¹¹² These powers are discretionary and not mandatory. It is important to note that it is the Saskatchewan Watershed Authority which monitors water quality, quantity, source, use and costs of water, watershed and related land resources.¹¹³ The Minister of the Environment has the power to request access to operational records (water quality tests) of waterworks permittees, however there doesn't

¹⁰⁶ S. 5 of *The Water Regulations*, 2002 E-10.21 Reg 1.

¹⁰⁷ S.23 of EMPA requires a permit for construction and operation of waterworks and s. 59 required compliance with conditions of a permit.

¹⁰⁸The Honourable Robert D. Laing, Commissioner, *Report of the Commission of Inquiry into matters relating to the safety of the public drinking water in the City of North Battleford, Saskatchewan, March 28, 2002*.

¹⁰⁹ The Saskatchewan Watershed Authority has announced monitoring throughout the province. See Warner, Erin, "Watershed Authority, New method of studying Sask. Water launched" in *The Leader Post*, January 28, 2006 page A6.

¹¹⁰ Boyd, David, *Unnatural Law, Rethinking Canadian Environmental Law and Policy*. (2002, University of British Columbia, Vancouver) at p. 18.

¹¹¹ S.46(1)and 52 allows immediate action of EMPA.

¹¹² S. 31 of EMPA.

¹¹³ S.6(1)(f) of *The Saskatchewan Watershed Authority Act, 2005*.

appear to be a legal obligation to provide such water quality tests to the Minister (unless this is made a condition of a water permit).

Saskatchewan controls by regulation the disposal of sewage or sewage effluent in respect of groundwater in *The Shoreland Pollution Control Regulations, 1976*¹¹⁴ which provides that no person shall dispose of sewage in a shoreland development area, into surface, ground water, storm sewage works or within proximity to a well without prior approval. These regulations appear somewhat out of date as they refer to acts and regulations no longer in force.¹¹⁵

Operators of sewage works or industrial effluent works “may” be required in their permit to disinfect any effluent from their works. If they are so required and their disinfection equipment fails or the level of disinfection required is not achieved, there is an obligation to report this to the minister.¹¹⁶

Environmental Review of Activities

Ministerial approval is required for any project, operation or activity or alteration, expansion of one of these that is likely to have an affect on any unique, rare or endangered feature of the environment, substantially utilize any provincial resource (and pre-empt its future use), cause the emission of pollutants, cause widespread public concern because of potential environmental changes, involve new technology concerned with resource utilization that may induce significant environmental change or have a significant impact on the environment.¹¹⁷ Environment is air, land and water, plant and animal life, including man and the social, economic and cultural conditions that influence the life of man or a community.¹¹⁸

An environmental impact assessment is required for review by the Minister and the Minister may give approval if all the requirements of the Act have been met imposing any terms and conditions considered necessary or refuse to approve. No guidance appears in the legislation for the Minister’s decision. The Minister is obligated to give notice as prescribed in the regulations of assessments (however, there aren’t any regulations) and may hold a public information meeting or direct an inquiry in respect of a development.

There is no provision in the legislation, and there are no regulations, setting out the requirements of the Environmental Impact Assessment. Other jurisdictions require a project proponent demonstrate firstly the need for the

¹¹⁴ S.R. 54/76 as amended by S.R. 56/96

¹¹⁵ s. 5 refers to the *Waste Management Regulations, 1972* and s.6 *The Water Management Act, 1972*, neither of which continue to exist.

¹¹⁶ S.18 of *The Water Regulations, 2002, supra*.

¹¹⁷ S. 2(d) and 8 of *The Environmental Assessment Act*, S.S. c. E-10.1.

¹¹⁸ s. 2(e) of *The Environmental Assessment Act*, S.S. c. E-10.1.

project and then alternatives to the project.¹¹⁹ It may be that Saskatchewan's environmental assessment process only outlines effects on the environment of the project and the proponent's mitigation efforts without the project proponent having to justify the requirement of the project in the first place.

Nonpoint Source Water Pollution

Many experts and scientists believe that current water quality problems are caused by nonpoint source pollution such as agricultural runoff, urban runoff and air pollution.¹²⁰ This source of pollution is largely void of effective environmental laws. In fact, some legislation actively immunizes these activities from even citizen legal action. *The Agricultural Operations Act*¹²¹ effectively protects all agricultural operations from a citizen's court action on the grounds of nuisance for an injunction unless the citizen has first proceeded through the Agricultural Operations Board and can prove the agricultural operation is being conducted in a manner not consistent with normally accepted agricultural practices. Canada, as well as other countries, is unable to keep up with the monitoring and passage of laws banning toxic chemicals from usage. There are 110,000 chemicals in use globally and approximately 1,000 added annually which are either rare or totally unknown in nature. The *Canadian Environmental Protection Act* only designated approximately 50 substances as toxic (even though 350 have been identified as present in the Great Lakes). The United States designates 70,000 in its *Toxic Substances Control Act*.¹²²

Reactive management of environmental spills

Reactive management of environmental spills occurs through reporting obligations in s.3 – 8 of *The Environmental Management and Protection Act* and *Environmental Spill Control Regulations*. There is a prohibition on discharging substances that are or may cause an adverse effect¹²³ unless otherwise permitted pursuant to the Act or the regulation or any other Act or regulation, a permit, license or order.¹²⁴ Another provision provides that no person shall cause or allow the discharge of any substance that may cause or is causing an adverse effect to the quality of any water unless exempted in the regulations or prescribed.¹²⁵ If a discharge is made in contravention of this Act, it must be reported. The regulations do provide for small sewage works and industrial

¹¹⁹ In 1995 the Conservative government of Ontario tried to amend its Environmental Assessment Act to do away with these two requirements, unsuccessfully. See *Sutcliffe v. Ontario (Minister of Environment)* 2003 C.E.L.R. (3d) 219.

¹²⁰ Boyd, David, *Unnatural Law, supra* at p. 36.

¹²¹ S.S. 1995, c. A-12.1

¹²² Boyd, David, *Unnatural Law, supra* at p. 38-41.

¹²³ Defined in s. 2 as "impairment of or damage to the environment, or harm to human health, caused by one or any combination of any chemical, physical or biological alteration."

¹²⁴ S.4 EMPA.

¹²⁵ unless the surface water is located wholly within the boundaries of privately owned land and doesn't flow directly or indirectly other than by percolation into other surface water. See s. 35 EMPA.

effluent works such as a facility disposing salt water, sediment or other wastes from oil or gas well operation or development, or a facility that stores industrial waste in a building or mine if not subsequently disposed in the environment, a discharge from an intensive livestock operation or with permit.¹²⁶ It is unclear how pollution free water in Saskatchewan will be after the summation of all these exemptions.

Alberta Water Quality Law

Potable Water

Water quality is managed by Alberta Environment.¹²⁷ There is no overarching responsibility on the Minister in Alberta to be responsible for the environment as in Saskatchewan. However, s. 14 provides:

14(1) In order to further the protection and wise use of the environment, the Minister shall, after having complied with any applicable regulations regarding public input or, in the absence of regulations, after having engaged in any public consultation that the Minister considers appropriate, develop ambient environmental quality objectives in qualitative or quantitative terms for all or part of Alberta.

It is interesting to note the inconsistent language of “wise use” and protection appearing within the legislation. This language also appears in the clause 12(i) outlining the duties of the Minister of the Environment:

shall generally do any acts the Minister considers necessary to promote the protection and wise use of the environment for the benefit of the people of Alberta and future generations.

The language once again inconsistently refers to both “wise use” and the benefit of future generations.

Interestingly, Alberta Environment is responsible for both water quality and for water allocation decisions outlined above. As a result there may be a more consistent streamlined approach to the management of water. An assessment of the divisions of the government department, Alberta Environment and whether this in fact is the case would be required. Alberta still does not, as Saskatchewan, engage in source water protection and there are many exemptions affecting the ability of Alberta Environment to manage water in its

¹²⁶ S.6 of *The Water Regulations*, 2002 E-10.21 Reg 1.

¹²⁷ Alberta sets very strict, legally enforceable regulations which parallel the American standards Julie Stauffer, *The Water You Drink, Safe, or Suspect* (2004, New Society Publishers, Gaviola Island, British Columbia) Only Alberta and Quebec require filtration and disinfection for all water sources.

entirety. Further, Alberta can't escape from the federal inability to regulate and protect the environment from toxic substances.

Part 7 of *The Environmental Protection and Enhancement Act* ("EPEA")¹²⁸ contains provisions dealing with potable water. The *Potable Water Regulation*¹²⁹ requires that all water supplies from a waterworks system must be disinfected in accordance with standards and guidelines and in order for waterworks systems to be approved they must contain terms and conditions for disinfections including frequency, levels of disinfecting agents and contact times for disinfectants. Waterworks systems must comply with minimum potable water treatment design requirements must be complied with as well as the standards of *the Guidelines for Canadian Drinking Water Quality* set by Health and Welfare Canada.¹³⁰ The owner of the waterworks system is required to notify the Director of the names of the certified operators in direct supervision of the operation of the facility and provisions for certification of operators of waterworks systems and wastewater systems are set out. Conditional certificates are provided for where small and very basic water supply systems exist.

It is the duty of the person responsible for a water works system to ensure that the potable water supplied by the system does not contain a substance in a concentration that varies from the specified concentration for the substance set out in any applicable approval or the regulations.¹³¹ Regular testing must occur and reports sent to the Director. If there is any failure or shut down of equipment used for disinfection, this information must be immediately reported to the Director and Regional Health Authority.¹³²

If the Director is concerned about the operation of a waterworks system he or she may issue an environmental protection order ordering the person responsible to take the necessary action to remedy the situation and if the waterworks system is or may cause significant adverse effect on human life or health an inspector, investigator or the director may take emergency measures considered necessary.¹³³

The release of substance into a waterworks system that causes the potable water to be unfit for its intended uses or cause the concentration of the substance or of any other substance in the potable water supplied by the system

¹²⁸ S.A. 1992, c. E-13.3.

¹²⁹ A.R. 122/93; now A.R. 277/2003

¹³⁰ Standards and Guidelines for Municipal Waterworks, Wastewater and Storm Drainage System adopted in s. 6(1) of the *Potable Drinking Water Regulations*, A.R. 277/2003.

¹³¹ S. 149 A person responsible for a waterworks system is defined in s. 147 as the owner, operator, local authority that contracts to obtain potable water or grants a franchise for the supply of potable water, or any successor, assignee, executor or administrator, receiver, or trustee of these persons or their principals or agents.

¹³² S.11 and 16 of the *Potable Water Regulations*, R.A., 277/2003

¹³³ S. 151-152 of the EPEA.

to vary from the specified concentration in any code of practice or regulation is prohibited.¹³⁴

Provisions dealing with potable water also exist in Alberta Health and Labour legislation. Analysis for compliance monitoring is to be done at the government owned Alberta Public Health Laboratory.

On their face Alberta legislation and regulations appear more concise and stronger than those of Saskatchewan. However, deeper analysis is required to ascertain if having clearer, stronger, more concise legislation and regulation written into provincial laws and regulations results in better environmental stewardship. Studies in Ontario have shown that a vast majority of water pollution offences remain un-prosecuted.¹³⁵ In order to make progress in reducing water pollution from point sources active enforcement of the laws and regulations is required. An assessment of whether Alberta Environment enforces its legislation would be germane.

Environmental Review of Activities

Activities affecting the environment require review pursuant to *The Environmental Protection and Enhancement Act* ("EPEA").¹³⁶ Activities are defined in a schedule and provide a fairly comprehensive list of projects and other activities that could affect the environment. However, missing are activities dealing with forestry operations like cutting and harvesting of trees and exempted are drilling of water wells, oil wells, or gas wells.¹³⁷ Included is:

Any activity, diversion of water, operation of works or transfer of an allocation under a license for which an approval, license or an approval of a transfer of an allocation under the Water Act is required....[and] anything defined as an activity in the regulations under the Water Act for the purposes of that Act.¹³⁸

¹³⁴ s. 148 of the EPEA.

¹³⁵ In one study the number of known water pollution offences tripled between 1996 and 1998 from over 1,000 to 3,300 but fewer than ten companies were charged for breaking the law during the period. Many major corporations listed breaking the law for at least five consecutive years including Inco Ltd., Ethyl Canad, Domtar Inc., and Petro-Canada. Sierra Legal Defence Fund (1999) *Who's Watching Our Waters? A Report on Who's Polluting and the Government That's Permitting It*. Toronto, 2001 *Ontario's 2000 Dirty Water Secrets: A Report on Ontario's Wastewater Violations in 2000*. Toronto. See Boyd, David, *Unnatural Laws*, supra at p. p.34.

¹³⁶ S.A. 1992, c. E-13.3.

¹³⁷ Environmental Assessment (Mandatory and Exempted Activities) Regulation, Alta. Reg. 111/93

¹³⁸ EPEA, Sch. Of Activities, s. 9.

This includes drainage as well as just about anything that may alter flow or location of water that may cause siltation or erosion, or that may cause an effect on the aquatic environment.

The environmental review process begins when the director appointed under the EPEA act becomes aware of an activity or proposed activity. If the activity is mandatory then the proponent will have to conduct an EIA.¹³⁹ The director has discretion with proposed activities which are not mandatory as to whether the proponent must conduct an assessment or not. The next stage after the director review is the publication of a notice of the proposal for the activity in a newspaper. Any member of the public directly affected may file a statement of concern.¹⁴⁰ On the basis of this screening a report of the screening is prepared and the decision of whether an environmental impact assessment must be conducted is made.¹⁴¹ It is unclear who received notice of this decision other than the proponent.

If an Environmental Impact Assessment is required it must include the proposed activities location, purpose and potential impact on the environment and must be available to the public. Interestingly, the Alberta legislation does require the proponent to identify both the need for the activity and to provide alternative sites for the activity, which was omitted by Saskatchewan (albeit the Director can allow a proponent exemption from this requirement).¹⁴² The director reviews the terms of reference for the report and these are made available for public review and comments. The EPEA contains requirements for the report which may be modified or supplemented by the director.¹⁴³

It isn't clear how the environmental impact assessment report plays a role in decision-making, as there are a range of possible decision makers. If the activity is an energy project the report is directed to the Alberta Energy and Utilities Board; if it affects Alberta's natural resources then it is forwarded to the Natural Resources Conservation Board;¹⁴⁴ if the activity affects water and approval is required pursuant to the *Water Act* it is forwarded to the administrators of that Act. If none of these bodies must give approval to the project it is referred to the Environment Minister. Nothing in the *Water Act* or EPEA required the director to even consider the environmental impact assessment report in making his or her decision.

¹³⁹ *Environmental Assessment (Mandatory and Exempted Activities) Regulation, ibid.*

¹⁴⁰ Directly affected is generally a person who lives in the area, has a property interest in direct proximity of the proposed activity, has a direct personal or property interest that likely will be affected by the activity, or whose health or economic well being may be directly affected by it.

¹⁴¹ *Environmental Assessment Regulation, Alta Reg. 112/93*

¹⁴² s. 49(a) of EPEA. It would be interesting research to review actual activities authorized and note if in practise the legislation of Alberta makes any substantive difference.

¹⁴³ s.47 of the EPEA.

¹⁴⁴ *Natural Resources Conservation Board Act, S.A. 1990, C. N-5.5.*

The *Water Act* required the Minister of the Environment to set a provincial water management planning framework within three years which was to include a strategy for protecting the aquatic environment and may include matters relating to the integration of water management with land and other resources. As a result, Alberta's "Water for Life" strategy was developed.¹⁴⁵ This strategy envisioned a partnership approach to managing water and the formation of three groups: a Provincial Water Advisory Council, Watershed Planning and Advisory Councils, and Watershed Stewardship Groups. The goals have been identified as:

- Healthy, sustainable ecosystems
- A safe, secure drinking water supply
- Reliable, quality water supplies for a sustainable economy
- The knowledge necessary to make effective water management decisions¹⁴⁶

The strategy aims at promoting conservation and will complete an evaluation and make recommendations on the merit of economic instruments to meet water conservation and productivity objectives. The strategy envisions specific actions to achieve these goals over the next several years. All of these measures will be through partnership and cooperation, not legislation and regulation.

Water management plans, and water conservation objectives are authorized in the *Water Act*. The latter would protect a natural water body or its aquatic environment; outline waste assimilation uses or management of fish or wildlife. It may also set desired flow rates. These water conservation objectives could be implemented by building them into water management plans for consideration in licensing applications, Crown reservations (unallocable water and specific purposes for which water may be used)¹⁴⁷, Crown license for water conservation)¹⁴⁸, through regular priority aquatic habitat conservation or enhancement license.

Reactive management of environmental spills

The Environmental Protection and Enhancement Act (EPEA) prohibits the release into the environment of any substance that might cause a significant adverse effect, unless the quantity of the release is authorized.¹⁴⁹ The Act also gives the minister the ability to establish economic instruments including financial

¹⁴⁵ <http://www.waterforlife.gov.ab.ca/html/background2.html>

¹⁴⁶ <http://www.waterforlife.gov.ab.ca/html/consultation.html>

¹⁴⁷ s. 35 of the *Water Act*.

¹⁴⁸ S. 29(2)(b)

¹⁴⁹ s.98

incentives to protect the environment (i.e. to fence of wetlands from livestock and provide off-site watering system).¹⁵⁰

Part 8 of the EPEA deals with hazardous substances and pesticides and by regulation prohibits the use or application of pesticides in or on an open body of water or within 30 meters thereof.¹⁵¹ There are exceptions and exclusions.

Federal Water Quality Law

Legislative responsibility in respect of the environment suffers from Canada's constitutional anomaly. In 1867 through a series of meetings it was decided what heads of power the federal government and provincial governments would enjoy in the union which was to become Canada. At this time, the issue of the environment wasn't even part of the diplomatic officials' vocabulary, let alone an issue in need of comprehensive, consistent management. As a result, the management of the environment can be found dispersed into several heads of power. The federal government has powers over international trade, criminal law, fisheries, because of its national importance the courts have determined nuclear power, and matters of national and international concern. The provinces have jurisdiction over natural resources, property, and most Crown land within their boundaries. Provincial governments both create and delegate certain powers to municipal government. Because of this division of powers, the federal government involvement is somewhat circumscribed by the allocation and a hesitance to enter into matters of provincial jurisdiction (often this hesitance is also politically desirable!). Some of the more salient federal legislative provisions follow.

It is also important to point out that although Canadians may believe they have a right to clean potable water, it is not a legal right enshrined in any human right or Constitutional law of Canada, its common law or the *Charter of Rights and Freedoms*.

Canadian Environmental Assessment

A project (physical works like buildings, bridges, dams, disruption of fisheries habitat, interfering with navigable water)¹⁵² will require a federal Environmental assessment in certain circumstances. These include:

a) If the Minister of the Environment determines that a project could have a significant adverse transboundary effects and calls for such an assessment;

¹⁵⁰ s.13

¹⁵¹ *The Pesticide Ministerial Regulation* Alta. Reg. 43/97, s.9

¹⁵² What is a project is defined in the *Inclusion List Regulations* S.O.R./94-637 and the *Law List Regulations* S.O.R./94-639 sets out federal statutes that describe a regulatory duty giving rise to the environmental assessment process.

- b) a federal authority exercises one or more of the following duties, powers or functions in relation to a project:
- (i) proposes a project
 - (ii) sells, leases, or otherwise transfers control or administration of land to enable a project to be carried out,
 - (iii) contributes money or any other form of financial assistance to the project,
 - (iv) exercises in relation to the project a regulatory duty (such as a statutory authorization) that is included in the Law List Regulations.¹⁵³

An assessment may be self-directed in that the government agency or official exercising the authority that triggered the Act carries it out, or independent where a mediator or panel independent of the responsible authority conducts an independent assessment. The self directed assessments can be conducted as a screening which sets out environmental effects for a proposed project and what can be done to eliminate or minimize these effects. These are usually done for routine or small projects. 99% of federal environmental assessments are screenings or comprehensive studies which are both self-assessments (or completed by the project proponent).¹⁵⁴

A comprehensive study is conducted for large projects having the potential for significant adverse environmental effects such as large oil and natural gas developments, projects in national parks, larger projects that can cause harm in migratory bird sanctuaries or wildlife areas, major electrical generation projects and large industrial plants.¹⁵⁵

Mediation may occur in contested environmental assessment consultations which can also be done in conjunction with a panel review. The Minister of Environment may order a panel review. A responsible authority must recommend a panel review to the Minister (and in the case of a comprehensive study the Minister must order this) where as a result of a screening or comprehensive study public concerns warrant further study, or if taking into account mitigation measures, it is still uncertain whether the project will have significant environmental effects.¹⁵⁶

¹⁵³ S.O.R./94-639.

¹⁵⁴ Kwasniak, Arlene, *Alberta's Wetlands: A Law and Policy Guide*, (2002: Environmental Law Centre, Edmonton) at p. 33.

¹⁵⁵ Comprehensive Study List Regulations S.O.R./94-638

¹⁵⁶ ss. 20

Public notification isn't required in the case of screenings but is in the case of comprehensive studies and public comments on these studies.¹⁵⁷ A review in 1999 shows that public participation occurred in 10-15% of screenings.¹⁵⁸ In mediations the mediation may allow "interested parties" to participate in mediation and in panel review hearings the public must be provided an opportunity to participate. There is the potential for some participant funding in panel reviews and mediation.¹⁵⁹

The decision as to whether approval is given for a project is determined based on a principle of harm. If there are no adverse effects, the effects can be mitigated, or the adverse effects are justified in the circumstances, the project will proceed. It is only when adverse effects can't be mitigated, and are not justified, a project will not receive approval.¹⁶⁰

Fisheries Act, Migratory Birds Water Quality provisions

The federal *Fisheries Act*¹⁶¹ contains provisions making it offence to alter, disrupt or disturb fish habitat without authorization from the federal Minister of Fisheries and Oceans in accordance with any regulations (there are no regulations as yet). Further it provides that no one may deposit a deleterious substance in any type of water frequented by fish or in a manner that results in the substance entering water frequented by fish.¹⁶² Deleterious is defined broadly as any substance that would degrade, alter, or form part of a process of degradation or alteration of the quality of that water so as to render or likely render the water deleterious to fish.¹⁶³

Large allowance for deposit of deleterious substances (i.e. industrial effluent) are allowed through regulations under the act or obtaining approvals.

The *Migratory Birds Regulations*¹⁶⁴ provides that no person shall deposit or permit to be deposited oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds.¹⁶⁵

Inter-jurisdictional Water Quality

¹⁵⁷ ss.16

¹⁵⁸ T. Shillington, Background Study on Public Participation in Screening and Comprehensive Studies: Final Report Prepared for the Five-Year Review Team Canadian Environmental Assessment Agency online: Canadian Environmental Assessment Agency: www.ceaa-acee.gc.ca/0007/0002/0002/bkstd10_e.htm.

¹⁵⁹ www.ceaa.gc.ca website provides information.

¹⁶⁰ S. 20, 23, and 37 CEAA.

¹⁶¹ R.S.C. 1985, c. F-14.

¹⁶² S. 35 and 36 of the *Fisheries Act*.

¹⁶³ S.34 of the *Fisheries Act*.

¹⁶⁴ C.R.C., c. 1035

¹⁶⁵ S. 35. The provision envisions regulations allowing this but to date there aren't any.

The *Canada Water Act*¹⁶⁶ contains provisions respecting inter-jurisdictional water¹⁶⁷ resources and pollution, as well as waters within the exclusive jurisdiction of the federal government. For waters within the exclusive jurisdiction of the federal government (on federal lands) or any inter-jurisdictional waters, or waters the water quality management of which has become a matter of urgent national concern, the Minister may enter into an agreement with one or more provincial governments to designate the waters as a water quality management area and provide programs to restore, preserve and enhance water quality.¹⁶⁸ Once so designated, no waste may be deposited in these water unless permitted with the payment of a prescribed fee.¹⁶⁹ No regulations have yet been passed pursuant to the Act.

Alberta/Saskatchewan Inter-provincial Agreement relating to SSRB

Prairie Provinces Water Board (“PPWB”)

The PPWB is an example of provincial and federal cooperation in managing a natural resource. Sometimes this is termed “cooperative federalism.”¹⁷⁰

To resolve conflicts between upstream uses and downstream needs, Alberta, Saskatchewan, Manitoba and Canada signed the Prairie Provinces Water Board Agreement on July 28, 1948. This agreement was particularly important as all three provinces rely on runoff from the eastern slopes of the Rocky Mountains which flows through major rivers eastwards across these provinces and ending in Hudson Bay. The SSRB is one of the rivers which are the subject of this agreement.

The four governments entered into the Master Agreement on Apportionment on October 30, 1969, which provided an apportionment formula for eastward flowing inter-provincial streams, gave recognition to the problem of water quality, and reconstituted the PPWB. The Master Agreement was amended in 1992 to add a Water Quality Agreement. The Master Agreement contains a simple formula based on the principle of equal sharing of available water in the Prairies. The formula states that Alberta and Saskatchewan may each take up to one half of the natural flow¹⁷¹ of water originating within their

¹⁶⁶ R.S.C. c. C-11.

¹⁶⁷ Inter-jurisdictional waters are defined as any waters, whether international, boundary or otherwise that significantly affect the quantity or quality of waters outside the province (whether situated inside the province or not) in s. 2(1)

¹⁶⁸ Ss. 11, 13, 15 of the *Canada Water Act*.

¹⁶⁹ S. 9 of the *Canada Water Act*.

¹⁷⁰ Steven Kennett, *Managing Interjurisdictional Waters in Canada* (1991, Canadian Institute of Resources Law, Calgary)

¹⁷¹ Natural flow, an important part of the Master Agreement's formula, is broadly defined as the volume of flow that would occur if a stream river had never been affected by human activity. The

boundaries and one half of the flow entering the province. The remainder is left to flow into Manitoba.

The current mandate of the Prairie Provinces Water Board is to ensure eastward flowing inter-provincial streams are, in accordance with the provisions of that Agreement, shared equitably, that water quality at inter-provincial boundaries is maintained at acceptable levels (due to a 1992 amendment to the agreement), and to facilitate a cooperative approach for the integrated development and management of inter-provincial streams and aquifers to ensure their sustainability.¹⁷²

The PPWB is made up of one representative each from Alberta, Saskatchewan and Manitoba, and two from the federal government. Apart from preparing reports and recommendations on water sharing, the Board is also responsible for promoting continued cooperation and consultation among the three provinces and Canada on water matters.

The PPWB has three permanent committees made up of personnel from provincial and federal agencies, that assist in technical work, such as data analysis, and provide advice to the board. The Committee on Hydrology studies questions related to the quantity of water in streams crossing provincial borders. The committee also reviews natural flow calculations for use in the Master Agreement's formula. The Committee on Water Quality coordinates the PPWB water quality monitoring program, addresses issues about the quality of water crossing inter-provincial borders and is responsible for the Water Quality Contingency Plan. The contingency plan keeps downstream water users informed of any contaminant spills or unusual water quality conditions. The Committee on Groundwater deals with questions related to the use and the quality of groundwater shared by the provinces.

The Master Agreement on Apportionment has enabled the equitable sharing and protection of inter-provincial streams while developing a consensus approach to preventing inter-provincial surface and groundwater problems. Because of the PPWB's consensus approach, provincial governments, as the primary regulator of water supplies, have always complied with the Agreement. Therefore, the Master Agreement could be referred to as a model of "cooperative federalism" for dealing with inter-jurisdictional issues. An indicator published by the government of Alberta shows that Alberta meets its water obligations

calculation of natural flow results in the three provinces, even in drought periods, receiving approximately equal shares of the total water flow. The provinces then decide how they will use their share of water. <http://www.quantumlynx.com/water/vol13no1/story7a.html>

¹⁷² <http://www.mb.ec.gc.ca/water/fa01/index.en.html>

pursuant to the Master Apportionment Agreement and is actually allowing more water to flow eastwardly than it is obligated to.¹⁷³

Environment Canada fulfills the monitoring conditions described under the Master Agreement and provides information from 75 long term water quantity monitoring stations, 16 meteorological stations and 12 water quality monitoring sites. Other agencies provide information from an additional 13 water quantity monitoring stations. Five of the water quantity stations are also used for international apportionment calculations. The information collected at these stations is used to calculate natural flows and the levels of water quality parameters. There are two monitoring stations on the SSRB, the Red Deer River Alberta/Saskatchewan Reach, and the South Saskatchewan River Reach.

The values calculated for 14 water quantity and 12 water quality monitoring sites along the Alberta-Saskatchewan and Saskatchewan-Manitoba borders are used to inform the PPWB whether requirements of the Agreement are being met. Although the Agreement applies to all eastward flowing inter-provincial streams, formal apportionment calculations are only done for eight stream locations with significant water use upstream. Only eight of the water quality sites are monitored monthly with the other four monitored less frequently.

The Agreement on Water Quality was signed, and became Schedule E to the *Master Agreement on Apportionment*, in 1992. The Agreement defines the water quality mandate of the Board in inter-provincial watercourses. It states that the Board shall "foster and facilitate inter-provincial water quality management among the parties that encourages the protection and restoration of the aquatic environment".

The Agreement on Water Quality defines the duties of the Prairie Provinces Water Board in relation to its water quality mandate. The duties of the Board are to:

- (i) monitor the quality of the aquatic environment in the river reaches and make comparisons with the PPWB objectives;
- (ii) review the appropriateness of the PPWB objectives;

¹⁷³ http://www3.gov.ab.ca/env/soe/water_indicators/30_apportionment.html Between 1985 and 2003, three of the monitored locations experienced years where the upstream user was unable to supply the agreed-upon amount of water. These locations are Middle and Lodge Creeks, which flow from Alberta to Saskatchewan, and the St. Mary River, which flows from the United States into Alberta. Although there were some years when Alberta could not deliver this required flow, there is no noticeable trend in supply.

- (iii) provide written reports on the quality of water in inter-provincial river reaches and on water quality issues;
- (iv) promote the establishment of compatible water quality objectives in the prairie provinces;
- (v) promote a preventive and proactive ecosystem approach to inter-provincial water quality management;
- (vi) promote the recognition of the interdependence of quality and quantity of water in the management of watercourses.

To encourage the protection and restoration of inter-provincial streams, the Agreement on Water Quality includes a set of PPWB Water Quality Objectives. PPWB members will strive to meet these objectives to protect all downstream uses including aquatic life. The Water Quality Objectives are each specific to reflect the individual characteristics and uses of each river reach.

The PPWB makes quarterly comparisons of inter-provincial water quality monitoring results with the objectives. When the objectives are exceeded, the Committee on Water Quality - an operating committee of the Board - prepares a report to the Board, with an explanation and a recommended course of action. The Board then makes recommendation to its member agencies on how to resolve any problems.

The PPWB has put in place a contingency plan to respond to a spill affecting water quality with inter-jurisdictional surface or ground water effects. The province in which the spill occurs is obligated to inform the appropriate downstream agency and Environment Canada. These agencies then do appropriate monitoring and take protective measures.

Groundwater Activities

When ground waters lie across one of the common borders of the Prairie Provinces, the water in the aquifer falls under the mandate of the Prairie Provinces Water Board (PPWB). This mandate extends both to quantity and quality of the ground waters.

Conclusion

This review of the water allocation and quality legislation in the SSRB comprised of Alberta, Saskatchewan and the federal government laws and rules has illustrated several broad conclusions:

- (1) Saskatchewan manages water as a public resource under the auspices of a Crown Corporation with input from local advisory

committees. A review of the legislation and regulations shows that transparency appears to be lacking. However, in a province with a population of less than one million people, perhaps this governance structure is most appropriate for participative community management of Saskatchewan's water resource. Clearly further study is required to ascertain if this legislative scheme allows the facilitation of corporate and industrial interests in water usage and profit, or grass root, community water management;

- (2) Alberta water legislation enshrines both "wise use" and sustainability principles. Research on how these contradictions in principle are effected in practice would be fascinating. The market mechanism of facilitating water transfers and the effective grandfathering of prior water interests would appear to show more emphasis on wise use and development. However Alberta's "Water for Life Strategy" and other initiatives are cautious cause for optimism, if they have any concrete outcomes other than facilitating further water management plans and allowing a greater number of water transfers in order to facilitate industrial development and degraded water quality;
- (3) Alberta's legislation in respect of water quality has a semblance of accountability as one Minister/government department has effective control over both water quality and quantity decisions and environmental management. However, the Alberta legislation contains no substantial environmental obligations on this Minister; conversely, the Saskatchewan legislation contains verbiage of obligations in respect of the environment, but does this result in increased stewardship? Both jurisdictions continue to have exemptions for many industrial emitters and dischargers into the environment;
- (4) In both Alberta and Saskatchewan the municipalities continue to bear the burden of water quality and the provision of potable water to their residents. Alberta's legislation appears on its face to have stricter drinking water standards. It's unclear if this results in better drinking water. The provinces have jurisdiction to allow better control of source point pollution, but continue the more expensive response of passing this clean water obligation to municipalities; the federal government has the ability to make toxic chemicals criminal but remains inactive in this field. Substantive environmental change in Alberta and Saskatchewan, resulting in improved water quality doesn't appear

likely without a transformative change to environmental planning and priorities;

- (5) The Prairie Provinces Water Board is an important initiative in provincial and federal dialogue in respect of water allocation and quality in the SSRB. However, it would be difficult to enforce legally and depends on continued participation, cooperation, and agreement of Alberta, Saskatchewan and the federal government.

A review of the federal and provincial legislation and regulations in respect of water allocation and quality is informative and enlightening. However, further research is needed to ascertain if the conclusions drawn from the discourse of this statutory legislation and regulation is reified in the practical application of water resource management in Alberta and Saskatchewan.