

WATER LAW AND POLICY ISSUES IN CANADA

by

Harriet Rueggeberg and Andrew R. Thompson

**Report on a workshop for the
Inquiry on Federal Water Policy**

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**Westwater Research Centre
The University of British Columbia
Vancouver, B.C. Canada**

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Westwater Research Centre was established in 1971 as a unit of the Faculty of Graduate Studies at The University of British Columbia. Its function is to conduct interdisciplinary research on the management of water and associated resources. The Centre aims to provide an improved foundation for decisions about policies and institutional arrangements through rigorous analysis of the alternative courses of action that might be undertaken. Results of research are published in books, a periodical bulletin, *Westwater*, and a series of reports; publications presently available are listed at the back of this book. Before publication manuscripts are submitted firstly for critical review by external referees and then for approval by a Publications Committee of the Westwater Council. Members of the Westwater Council are as follows: John Chapman, Professor, Department of Geography, The University of British Columbia; Irving Fox, Professor Emeritus of Community and Regional Planning, The University of British Columbia; William Harland, Crippen Consultants Ltd., Keith Henry, Private Consultant; Peter Larkin, Associate Vice-President, Research, The University of British Columbia; Les Lavkulich, Professor and Head, Department of Soil Science, The University of British Columbia; Winston Mair, Private Consultant; Murray Newman, Director, Vancouver Public Aquarium; William Oldham, Professor and Head, Department of Civil Engineering, The University of British Columbia; Bruce Partridge, Cominco Ltd.; Anthony Scott, Professor, Department of Economics, The University of British Columbia; Peter Suedfeld, Dean, Faculty of Graduate Studies, The University of British Columbia; Andrew R. Thompson, Director, Westwater Research Centre, The University of British Columbia; Brahm Wiesman, Professor and Director, School of Community and Regional Planning, The University of British Columbia.

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This publication is based on a workshop organized by the Westwater Research Centre for the Inquiry on Federal Water Policy. To provide legal background on water issues to the Inquiry, Westwater invited a number of experts in the field of water law and policy to prepare papers dealing with particular issues that confront water managers in Canada at this time. These authors then attended a workshop in Toronto at which the papers were reviewed and the participants were invited to discuss the subject of water law and policy in Canada in an organized and structured way with the hope that there would emerge a comprehensive evaluation of current issues. The members of the Inquiry, as well as some Inquiry staff, attended the workshop.

We wish to acknowledge the financial support provided to Westwater by the Inquiry for the purpose of preparing the background papers, convening the workshop and preparing this report of its deliberations. In particular we wish to thank Dr. Peter Pearse, Chairman, and Françoise Bertrand and James MacLaren, members of the Inquiry, for their participation in the workshop discussions. In addition, we received support for the workshop from the Inquiry's executive director, Elizabeth Dowdeswell, and the director of research, Dr. Frank Quinn.

To each of the authors of background papers, we also express our appreciation. Their contributions are included in the publication as a series of appendices following the main text. They are D. Chesman, third year law student at The University of British Columbia; Professor D.R. Percy of the Faculty of Law, University of Alberta; Professor Lorne Giroux, Faculté de droit, Université Laval; Letha MacLachlan, practicing lawyer in Yellowknife and counsel to Dene Nation; and Philip G.C. Ketchum Q.C., of the Department of Justice, Edmonton.

Other water law experts who participated in the workshop were Professor Charles Bourne of the Faculty of Law, The University of British Columbia; Professor Donald Dewees, Faculty of Law, University of Toronto; Professor Scott Fairley, Faculty of Law, University of Windsor; and Lynn Heustis, Lawyer, Law Reform Commission of Canada.

The analyses and opinions in the main text and the papers are exclusively those of their respective authors. While the members of the Inquiry and its staff were lively participants in the workshop discussions, they made clear that their purpose was to listen and to be informed. The views of the Inquiry on water law and policy issues in Canada will appear in its final report.

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I

THE PURPOSE OF THE WORKSHOP

Historically, people in Canada have taken the abundance of water for granted. Yet water is by no means an unlimited resource, as most Canadians have now come to realize. Our demands for 'good' water for domestic, agricultural and industrial use, as well as for providing fish and wildlife habitat, recreational opportunities and pure natural beauty, are already stretching the limits of available water supply in many parts of Canada. Obviously, some rules are needed if these demands are to be met in a fair way.

If one takes all the provinces, the two territories and Canada into account, there is a myriad of laws in Canada which govern when, where, how and how much water we can use, as well as what we can put back into water. Some of these laws are written down, some are not-- but collectively, they determine and protect our "rights" to water.

The Inquiry on Federal Water Policy, in its recent publication Water is a Mainstream Issue, states that one of its goals is "to identify and describe emerging water issues in Canada", determining the scope of federal responsibilities in these issues and how they mesh with other jurisdictions. From this, the Inquiry will recommend positions and strategies the federal government can take within its jurisdictional power to help resolve these issues.

To help it meet this goal, the Inquiry asked the Westwater Research Centre of the University of British Columbia to organize a workshop aimed at providing it with a good understanding of water law in Canada. More specifically, the purpose of the workshop was to: 1) develop some sort of consensus as to where water law is clear and where it is ambiguous; where it is adequate and where it

is not in dealing with water issues; 2) suggest how water law can be improved to help deal more effectively with problems faced by the country; and 3) identify specific areas of law that need further consideration and research. It was also decided at an early stage to limit the focus of the workshop to dealing with inland or freshwater issues.

Westwater invited people from across Canada who were well versed in the legal aspects of water use and knowledgeable in the issues involving the country's water resources. The workshop sessions were organized around six major topics:

- basic water law in Canada;
- federal/provincial jurisdiction over water;
- interprovincial water management;
- water law in northern Canada;
- Indian rights to water on reserves; and
- international (Canada/U.S.) water law.

Several participants wrote briefing papers on one or more of these topics. These provided background information from which discussion of the major issues could be launched. The format was informal--round-the-table discussion and exchange of ideas. But the mood was often intense as everyone attempted to clarify the fundamental legal components of the issues, and to suggest ways that the federal government, within its legal mandate, could respond to them.

This report summarizes the discussions and findings of this Workshop on Water Law in Canada. It is organized around the same topics discussed in the Workshop sessions. In each chapter, we attempt to provide enough general background so that the reader can understand the major issues related to that topic as well as gain some knowledge of the general content of water law in Canada. The last chapter brings together the recommendations generated in the workshop sessions, and also summarizes the participants' views on what the federal government's role should be with respect to research on water law and management issues. These views are, of course, those of the participants, and are intended to stimulate discussion about water policy issues. They are not the views of the Inquiry Commissioners, who will form their own opinions when their process of study and public consultation is completed. Meanwhile, we hope this report fulfills its objective of stimulating discussion and provides useful and enjoyable reading for members of the Inquiry as well as for all Canadians concerned about our country's water resources.

II

BASIC WATER LAW IN CANADA

The first topics discussed in the workshop were what one might call 'generic' water law issues - problems or disputes that arise from the very nature of the law. The first section of this chapter introduces the main components of Canada's legal system as it pertains to water. The second section then summarizes what the participants pin-pointed as the major issues regarding this basic water law.

Canadian Laws and Water

The 'types' of law

There are two types of laws that determine Canadians' rights to use water: common law (or civil law in Quebec) and statutory law. Common law is the term used to denote the rules established in English-speaking countries based on decisions that have been passed down through history by the courts. As such, many of the components (or rules) of common law remain unwritten, or are recorded in the form of judgments of courts in systems based on English law. Most of Canada - excepting Quebec - inherited the common law system from Great Britain.

Quebec is somewhat different in that much of its law originates from the Napoleonic code of France, which evolved differently from the legal systems of English-speaking countries. This basic French law is often called civil law to distinguish it from English common law.

In contrast, statutory laws (a statute being an Act) are rules established by the legislatures of countries, states, or provinces;

that is, they are not set case by case by a judicial system, but are deliberately formulated and enacted by the elected representatives of the people. The court's role then, with respect to statutory laws, is to interpret them for the purpose of deciding in specific cases exactly what was the intent of the legislature when the particular law was enacted. This need to interpret legislation arises when governments seek to enforce a prohibition or impose a penalty, or where a citizen seeks to force the government to act within the bounds of the legislation. Often the goal of statutory law is to modify or replace common law where the common law is inappropriate or inadequate to serve the purpose of the country or province. We will see examples of statutory modifications of common law dealing with water in the following sections.

Law-making in Canada

Canada is a federal country, which means that the power to make statutory laws is divided, by the Constitution, between two levels of government - the Parliament of Canada for the country as a whole and the provincial legislatures for the provinces. The provinces may delegate some of their powers to regional and municipal governments to deal with matters at those levels. The northern territories have legislatures that are not as yet fully recognized in a constitutional sense, but they have been delegated certain powers by the Parliament of Canada.

As for common law, although most of Canada inherited the British system, the common law is not consistent from province to province. Each provincial legislature has made somewhat different statutory modifications of the common law to fit the needs of that province. Each province also has its own judicial system, each of which may interpret the common law somewhat differently - again, being influenced by the needs of the particular province. However, because the Supreme Court of Canada is established as the final appeal court for all the provinces, its decisions tend to bring some uniformity among the provincial courts in matters of common law and statutory interpretation.

Common law -- riparian rights

Under common law, no one can own flowing water outright, but landowners who have water flowing over or percolating through their land hold certain special rights regarding the use of that water. The rights of owners of land to water flowing over their lands are called riparian rights and belong only to those who own the banks of rivers, lakes or other bodies of water. They include

the right of access to that water, to receive water in its natural state (subject to limited uses by upper riparians), to fish and to be able to sue anyone who interferes with their rights to water. Owners whose land contains underground water supplies are not riparian owners but at common law they had the right to use whatever quantities of water they could capture from the ground.

The concept of riparian rights -- special rights to water that are attached to land ownership -- is also a part of French civil law. A fundamental difference lies in how each system of law defines the ownership of the banks and beds of a river or lake. Under the common law, a landowner owns the banks and beds of bodies of water found on his land unless the deed conveying the land to his ownership states otherwise. If a body of water borders two or more properties, the common law rule applies whereby each landowner owns the banks and bed to the middle of the lake or stream.

Under civil law, however, ownership of beds and banks is established by navigability. If a water body is deemed navigable, riparian ownership stops at the high water mark, and the bank and the bed is vested in the Crown (i.e. owned by the state and managed by the government). If the water body is non-navigable, the land owner has rights similar to the riparian rights of the common law.

Statutory law

As one might suspect, the common law has been drastically modified by statutory law in Canada, particularly in terms of deciding who has rights to use water. For instance, in most provinces the beds of water bodies no longer belong to riparian landowners, but have been vested by statute in the provincial Crown. Legislation in most provinces now requires riparian owners to obtain a permit to store water or to take it in large quantities from a watercourse and requires landowners to obtain a permit before tapping underground water supplies. A permit will usually specify the maximum amount and rate at which the permit holder can take water from the particular source. Furthermore, people who do not own riparian land can also obtain permits to use water, to irrigate land at some distance from a river, for example. (Appendix A elaborates on the statutory modifications of riparian rights in the case of British Columbia; most provinces have similar modifications).

When dealing with water, statutory law has tended to develop along three major lines: laws dealing with water quantity (or allocation), laws dealing with water quality (waste discharge or

pollution), and laws that cover indirect uses of water such as fishing and navigation. For example, B.C. has entirely separate systems for regulating water use (quantity) and waste discharge (quality), each operating under its own legislation and administration with limited coordination between the government agencies involved. This trend to separate the regulation of water quantity from water quality seems to be common across Canada.[1]

Issues in Basic Water Law

The major issues associated with basic water law in Canada revolve around three general topics:

- the extent to which common law riparian rights still exist.
- the allocation of water among competing users.
- regulating water use to maintain high levels of water quality.

Riparian rights

- Do statutory laws totally replace riparian rights?

The extent to which a piece of legislation modifies or replaces common law riparian rights is not always clear, even to law experts. This confusion causes problems when a riparian owner wishes to sue another water user for injury to his water supply, especially where the other water user has a permit to use the water in the manner that causes injury. The question before the court then is: does the permit override riparian rights, and therefore provide a defense against a claim to damages based on injury to riparian rights? In most cases, the legislation providing for the permit does not say. As a result, in the western provinces for instance, a conflict of opinion exists within the legal profession as to whether the intention of legislators was to indeed abolish riparian rights altogether.

Lawyers have gone on to ask: should water use permits completely replace riparian rights? In our high-technology, high-demand society, water use permits are a more efficient means of allocating water than the riparian system. Many lawyers believe, however, that in the interests of water quality, the riparian owner's right to sue for injury where an upstream user might be discharging harmful contaminants is still a powerful means of preserving high quality conditions. They argue for retaining at least these aspects of riparian rights in water law.

- What are riparian owners entitled to?

Just how much water is a riparian entitled to, and how much waste can be discharged into a water system by a riparian, before there is "legal" impairment of the use of that water by other riparian owners? Two schools of thought have developed around this question. One -- called the "natural flow theory" -- claims that domestic use of water, for household purposes and perhaps for watering a garden, is the limit of acceptable riparian use. The second doctrine, known as the "reasonable use theory", has been developed extensively in the United States. Under this theory, the courts can decide, according to precedents set in past cases, if additional uses beyond merely domestic use, for irrigation or industrial waste disposal for example, are in the best interests of society. If so, they are "reasonable" uses and are acceptable under riparian law. In Canada, wherever riparian rights do still prevail, the courts have leaned towards the natural flow theory, but have kept an interested eye on developments in the U.S. regarding definitions of "reasonable" riparian use.

Water allocation

The fundamental legal questions asked about water allocation are, given that it is necessary to regulate water use, how should governments decide how much each user is entitled to? Should certain water uses take precedence over others? If so, how should the order of priority be determined?

- Problem 1: how much?

As mentioned earlier, most provincial legislatures have adopted licensing or permitting systems to regulate water consumption. Historically, licences or permits were allocated on a first-come, first-served basis, and often for indefinite periods of time. Now, as populations have grown and demands on water resources increased, it may be necessary for governments to be more selective in allocating this precious resource. But, due to historical precedent, many governments are in a bind. For instance, the early statutes did not provide for periodic re-assessment of water-use licences to see if these uses are still providing socially beneficial services, for judging whether the amounts allocated are inadequate or too generous, and for assessing whether the water so allocated is being used efficiently. Likewise, there are often no legal mechanisms for transferring the rights allotted under a given licence to another use that now may be of greater benefit. Finally, there are usually no legal mechanisms for re-negotiating the terms of permits.

or licences, no matter how inappropriate those terms may have become. In many cases, the only opportunity for changing licences or their uses is if one can prove that the use has been abandoned for a long time.[2]

In effect, then, the major problem in many statutory systems for allocating water is their lack of flexibility to re-assess and change licensed water uses so that the changing needs of society can be met.

- Problem 2: Priorities

Early legislation also did not anticipate limitations in our water supply and, hence, did not foresee the need to be able to set priorities among water users. In response to this perceived need, many provincial governments are attempting to establish some order of precedence in their policies, and to then follow these policies when allocating new water licences. But in terms of applying a priority system to old licences, they are usually severely limited by the inflexibility of the old system. In addition, politicians are often reluctant to overhaul the old systems or to try to incorporate priorities into legislation, due to the protests that this would draw from established water users as well as to the uncertainties inherent in choosing priorities in a rapidly changing world.

- A way out: a marketing approach?

Some water management experts claim that, in addition to being inflexible, many legislated water allocation systems are too bureaucratic, and too dependent on the discretion of government officials in deciding how water gets used. Many of these critics argue for a stronger marketing orientation, whereby water use would be determined largely by how much users are willing to pay. They maintain that this would increase users' appreciation of the "true value" of water, as users would have to compete for rights to its use, and this would, in turn, reduce wasteful consumption of water. It would also allow bartering among water rights holders. The proponents of a marketing scheme rely on the assumption, based in economic theory, that the open market accurately reflects the wishes of society; hence, "marketing" water rights would be the best means of attaining the most beneficial use of water according to society's priorities.

Opponents to a marketing strategy disclaim this assumption, maintaining that many important users would be unable to financially compete in an open market system, especially against large

corporate interests, and that these uses would then be neglected. Moreover, they maintain that many valuable water uses -- such as for conservation or aesthetic purposes -- cannot be quantified in dollars and would be ignored in a totally market-based system. Under this argument, some government intervention is necessary -- so long as it reflects the needs of the community it serves.

The "ideal" water allocation system

In discussing the issues and problems associated with allocating water use in Canada, the workshop participants proposed elements for what might be called an "ideal" legislated water licensing system. Such a system should incorporate:

- flexibility -- in being able to respond to changing water needs;
- incentives to conserve -- including provisions that compel efficient water use;
- the notion that water is a valuable resource -- not a free commodity, and subject to demands and limitations similar to those of any other renewable or nonrenewable resource (e.g. forests and minerals).

To be able to fulfill these characteristics, the "ideal" system should have the following features:

- where water rights have already been established, it should provide for the transferability and divisibility of these rights. By this we mean that if a licensed water use becomes redundant, or the amount allocated becomes too generous or too stringent, that the licensee can change the water use to another more feasible use, acquire additional water quantities where available, or transfer the water rights among several users.
- water licences should be allocated for certain time periods rather than be indefinite; this would automatically make the water use associated with that licence open for re-assessment.
- alternatively, it may be desirable to incorporate a process for periodic re-assessment by an independent tribunal or board, to judge whether the terms and conditions of water use licences still meet criteria and priorities of the community in which it operates.

- where water allocation is still in its initial stages -- such as in Canada's north, where much of the available water is still 'up for grabs' -- minimal flow requirements should be first established for streams, rivers and lakes. This could ensure that adequate water flow would always be available for such things as maintaining subsistence harvesting of fish and wildlife. The 'surplus' -- that amount of water over and above the minimal flow requirements -- could then be allocated for consumptive uses, perhaps on a first-come, first-served basis, but subject to provisions for transferability and re-assessment.
- finally, the system would allow users and holders of water rights to negotiate among themselves, whether for compensation to be paid for impairing water quality or for bartering water amounts among themselves. This would introduce some element of the open market system, but the results would be subject to government approval, so that the governments could ensure that "externalities" or undesirable effects on the community at large do not occur.

A system that incorporated these characteristics would avoid many of the problems experienced in today's water licensing systems; in effect, they represent what water managers have learned in terms of where legislated systems have gone wrong.

Water quality

- Problem 1: Coordinating water quality and water allocation

Legislation that deals with water quality problems has, in most areas of Canada, developed separately from legislation dealing with licensing water use. In many provinces, water quality and water allocation are administered by separate and often independent agencies of government. This, in itself, poses a problem to water managers, especially where allocation priorities should reflect water quality considerations, or water uses should not be licensed without considering the impact on water quality. It also poses problems to water users who may have to contend with dual, and perhaps even conflicting, regulatory systems -- one to allocate the amount of water and how it can be used, the other to lay down further terms and conditions on how water can be used and what wastes can be returned to the water environment. Making sure these regulatory systems at least correspond if not complement each other is an important issue in water law administration.

- Problem 2: Setting standards

A second important issue related to water quality involves asking two questions: what are adequate or desirable water quality standards? and -- how do we know that these standards are being met? The first question is one that governments all over the world have wrestled with, resulting in innumerable lists quoting maximum allowable (or desirable) concentrations of hundreds of chemicals and trace metals. Most of these standards' lists are put forth as government-endorsed guidelines rather than legal requirements, because guidelines are more easily altered in response to our ever-changing knowledge and opinions regarding such standards. Besides, to make such standards law would in most cases create serious enforcement problems.

In terms of the second question, difficulties arise in balancing what is desirable with what can be easily attained. Ambient water quality -- the "purity" of water as it occurs and is used -- is what most legislation is concerned with, but measuring and monitoring ambient water quality in site-specific situations is a formidable task. Instead, most regulatory systems are designed to 'second guess' ambient water quality, in that they are aimed at measuring and controlling the amounts and quality of waste that are discharged into the water environment. Basically, the system assumes that by controlling the amount of wastes at the point of discharge you can assure proper water quality in the overall water environment.[3]

This emphasis in Canada's regulatory system on controlling discharge quality as opposed to ambient water quality has led some water managers to question whether we are dispensing our regulatory energies and funding in the appropriate direction. Part of the answer lies in the fact that it is basically much simpler to control discharges than ambient quality levels. Perhaps the major focus of attention should be to figure out how to improve the interaction between what is desirable -- high ambient water quality -- and what we can most effectively work with -- discharge quality. How can we best determine dangerous concentrations of waste components? What happens when these components are discharged in combination rather than singly? Are there chemical or physical reactions that occur when these compounds reach fresh or salt water in the environment that increases their toxicity? What characteristics are important to know about a receiving water environment to judge its capacity to absorb wastes? Focussing on such questions could help bridge the gap between legislative concerns over ambient water quality and the current discharge-oriented regulatory systems.

• Problem 3: penalties vs. negotiation

Enforcing water quality standards and regulations is as much a political process as it is a legal process. Laying charges for breach of standards or conditions set in permits is not dependent solely on technical considerations. It is colored by such things as the discharger's ability to pay for decreasing pollution levels, the economic and political desirability of the project or industry, the degree of public support (or opposition) for the discharge, and general perceptions as to the feasibility of the standards.

Many lawyers believe that the criminal law approach is often inappropriate for the implementation of water quality standards. In many parts of Canada, charges may not be laid even when permit terms and conditions are consistently breached. Rather, negotiations occur between government regulators and the offending user. This changes the whole legal 'scene', from that of imposing penalties to that of drawing contracts and enforcing binding agreements. The degree to which this transition could, or should, occur is another issue and source of debate within not only the legal system but in all water management professions. (The subject is analyzed in depth by Barton *et al* in A Contract Model for Pollution Control, Westwater, The University of British Columbia, 1984).

Footnotes - II

1. As is pointed out in Appendix A, Yukon and the Northwest Territories are exceptions where water use and water quality are licensed by one administrative board under one statute, the Northern Inland Waters Act.
2. As Professor Percy told the workshop, in Alberta, where large tracts of land were made available to settlers, water rights were granted to irrigation companies, which tended to claim more water than they originally needed (or could possibly use) so as to provide for future expansion. As a consequence, many early Alberta water licences were very generous in the amount of water they allowed to each irrigation company. Once the large water rights were granted, both in Alberta and in American jurisdictions with similar systems, the fear arose that the holders of the oldest rights might use their monopoly to sell excess water to new settlers at a profit. Alberta and neighbouring American states countered this possibility by making a water licence appurtenant to the land on which it would be used, so that a licensee cannot transfer or sell water rights without transferring or selling the land to which they are attached. This pattern of granting extensive water rights and forbidding their transfer has meant that some old licensees hold very large water rights with no incentive to conserve water. These large existing licences may mean that there is not sufficient water available to provide water rights for new users.

In actual fact, water administrators in Alberta re-negotiated many earlier licences to reduce the amounts of water they allot so as to be able to spread the available water more evenly among the competing users. They are in some cases even transferring licences to other uses, where the benefits of a new allocation obviously outweigh those of an old one. Both actions, however, have no legal basis, and are even at times in violation of the province's statute. But they are necessary to meet the rising demand and changing priorities for an increasingly limited resource.

3. This is indeed the situation when one looks at federal legislation requirements and how they actually are met. Provisions in the federal Fisheries Act aim to protect fish habitat from pollution -- essentially, a concern with ambient water quality. However, regulations established under this Act to fulfill this aim are directed almost exclusively at waste discharge, stating how much of a number of dangerous compounds can be emitted into water inhabited by fish.