

Appendix 6

Water Licensing

1. Introduction

There are a range of different legal options that are used around the world in order to regulate and protect water resources. One such method is the issuance of Water Licences. These approval documents generally set out requirements for water use, licensing and usage fees, and reporting requirements. The issuance and administration of water licences can be the responsibility of a variety of different government and administrative authorities. There is also a range of different ways that these types of approvals can be integrated with environmental assessment and other legal frameworks within the jurisdiction.

Since natural resource and environmental law is developed based on the unique environmental, social, and political characteristics of the corresponding jurisdiction, the comparison of such legislation to other jurisdictions can be difficult. *The Water Power Act* is different from the majority of water legislation seen in other jurisdictions. The Act's focus is on the use and regulation of provincial water powers¹ and the Crown and other lands connected to the development or use of water powers. Most other comparable water legislation does not usually have such a limited scope and tends to include a range of potential water uses. However, the resulting Water Power Act Licences share some similarities with the water licences seen in these other jurisdictions.

Due to time limitations, this Memo will focus on the strengths of comparable water licensing systems and licensing documents in the Northwest Territories, the Yukon, British Columbia, and Alberta. A thorough review of the different legislative processes was not possible, but should be considered, especially for British Columbia and the Northwest Territories.

2. Manitoba

In Manitoba, water licences are issued under *The Water Power Act*. This Act is designated to manage and control water power activities that take place in the province. The Act applies to all provincial water powers, all undertakings, and all Crown lands required or connected to their operation (except those under federal jurisdiction).² A water power licence is required to divert, use or store water for power purposes.³

The Minister of Conservation and Water Stewardship is responsible for the management and control of provincial water powers and the administration of the Act through the department.⁴ Currently there are eighteen water power projects that have been licensed either at the Interim or Final stage.⁵

Water Power Act Licences:

Section 14 of *The Water Power Act* enables the province to issue orders and regulations for the diversion, use or storage of water for power purposes, or the transmission and distribution of water power. *The Water Power Regulation* addresses the licensing of water power projects and provides a detailed outline of the procedures a project proponent must follow when applying for a licence under the Act. According to the WPR, if an interim license is granted to begin development of a project and all conditions of that license are satisfied, then a final license must be granted.

1 Section 1: "**water power**" includes any force or energy of whatever form or nature contained in, or capable of being produced or generated from, any flowing or falling water in such quantity as to make it of commercial value.

2 *Water Power Act*, s. 4

3 *Water Power Regulation*, M.R. 25/88, s. 3

4 *Water Power Act*, s. 3

5 http://www.gov.mb.ca/waterstewardship/licensing/water_power_licensing.html

Interim Licences

If the Minister decides that the project is suitably designed, feasible, will be the most beneficial use of the stream, and that it is in the public interest, he or she may issue an interim license to the applicant [s.18]. If the project goes into operation before a final license is issued, the licensee is required operate to the satisfaction of the Director. The licensee may not raise the level of the water above that which has been fixed by the Director, and he or she must observe all the conditions that apply to final licenses [s.37-38].

Final Licences

There is no specific time when a final license must issue. According to s. 43(1), upon completion of the development and fulfillment of the terms of the interim license, the licensee is entitled to a final license authorising the diversion, use, or storage of water at the site. The final license will include the conditions set out in the interim license as well as any conditions the Minister may impose [s.44]. The term of the license may not exceed 50 years from the date of completion set out in the original, interim license [s.45(1)].

Conditions of Licences

The regulation sets out a number of conditions that must apply to all licenses—interim and final. These conditions apply largely to construction of developments, rental fees, and basic conditions of operation (water levels, flows, etc.).

Reporting Requirements:

There are very minimal reporting requirements under the Act and Regulations. Under section 34 of the *Water Power Regulation*, proponents operating under an interim licence are required to “submit such reports of progress during construction of the works as the director may from time to time require.” The licence documents themselves, including the LWR interim licence, also contain reporting requirements. For example, the LWR licence, in section 11 and 15(g) require that: “On the first day of each and every month, the Licensee shall submit a report to the Director showing the schedule for operating the said control structure at Jenpeg for the ensuing three month period, together with expected daily discharges from, and water levels on, Lake Winnipeg, Playgreen, and Kiskittogisu.”

Public Hearings, and Access to Licences:

Public hearings may be held under section 6(4) of the Act. There is no designated administrative body assigned to preside over such hearings. There is no requirement to make the findings and recommendations of the hearing body public. The Minister may take the results of a hearing into consideration when making a licensing decision under the Act.

There is no legal requirement to make licensing documents publicly available. However, Water Power licences are available online on the Conservation and Water Stewardship website.⁶ Other licensing documents are not usually available online.⁷

3. Other Jurisdictions

Although *The Water Power Act* is a unique piece of water legislation, in large part due to its focus on water power, there are other jurisdictions with legislation that addresses the regulation of water developments through a water licensing regime.

A) Northwest Territories

In the Northwest Territories, the *Waters Act* provides a framework for the administration of water use in the territory and forbids any use of water or deposit of waste without a license (excluding domestic or emergency uses).⁸ The Act is designed to work in concert with the *McKenzie Valley Resource Management Act*

6 http://www.gov.mb.ca/waterstewardship/licensing/water_power_licensing.html

7 The documents available for the LWR CEC hearing are an exception. See http://www.gov.mb.ca/waterstewardship/licensing/lake_wpg_regulation.html

8 S.N.W.T. 2014, c. 18

(MVRMA)⁹, which establishes a land and water management boards in the region and also sets out the legal process for environmental assessment.

The issuance of water licences in this territory is undertaken by:

- the Gwich'in Land and Water Board,
- the Sahtu Land and Water Board,
- the Wekeezhii Land and Water Board,
- the Mackenzie Valley Land and Water Board.¹⁰

There are two types of water licences issued in this jurisdiction: Type A and Type B.¹¹ Some of the activities that require a water licence are:

- 100 m3 or more of direct water use per day;
- A municipality or camp that uses more than 50 m3 of water per day;
- Construction of a structure across a water course five or more metres wide at ordinary high water mark;
- Channel and bank alterations, erosion control, diversion of water, alteration of flow or storage of water (dam or storage reservoir);
- Draining or infilling of a water course;
- Any deposit of waste (solid waste, sewage, oil drilling etc.); and
- Industrial or mining and milling activities that use more than 100 m3 of water per day¹²

*Waters Regulations*¹³

The *Waters Regulations* under the *Waters Act* set out criteria for the licensing or exemption of undertakings in which water is to be used or waste is to be deposited. Schedule B describes the criteria for classification of undertakings. Schedule G sets out the licensing criteria for power undertakings.

Reporting:

Section 14 of the Act sets out the requirements for records and reporting. Reporting Requirements are also set out in the licensing document.

- 14.** (1) Every licensee shall maintain accurate and detailed books and records, and shall submit a report to the Board each year, on or before the anniversary of the date of issuance of the licence, setting out the quantity of water used under the licence and the quantity, concentration and type of waste deposited under the licence.
- (2) A report submitted under subsection (1) shall be signed by
- (a) the licensee, if the licensee is an individual; or
 - (b) an authorized agent of the licensee, if the licensee is not an individual.

Public Hearings and Access to Licences:

⁹ S.C. 1998, c. 25

¹⁰ The MVLWB consists of: The MVLWB Chairperson, nominated by the majority of the members and appointed by the Minister of Aboriginal Affairs and Northern Development Canada (AANDC); Five members of the Sahtu Land and Water Board; Five members of the Gwich'in Land and Water Board; Five members of the Wek'eezhii Land and Water Board; and, Four members appointed pursuant to Section 99 of the MVRMA. See <http://mvlwb.com/content/about-us>. We note significant change pending on April 1, 2015 where a new 11-person superboard is supposed to come into effect. It is intended to replace the Wek'eezhii, Sahtu and Gwich'in land and water boards. This change (from decentralized boards to a superboard) is currently subject to an injunction (the injunction being appealed by the federal government) – see <http://www.cbc.ca/news/canada/north/canada-appeals-decision-delaying-n-w-t-land-and-water-superboard-1.3010987>.

¹¹ See s. 26(1) of the *Waters Act*, s. 7 of the *Waters Regulation*: “a licence issued under subsection 26(1) of the Act shall be a type B licence for one or more uses of water or deposits of waste set out in column I of any Schedules D to H, where any one of those uses or deposits (a) meets a criterion set out in column III of the Schedules; or (b) meetings a criterion set out in column II of the Schedules, but does not meet the requirements of paragraphs 4(1)(a) and (b). (2) A licence issued under subsection 26(1) of the Act shall be a type A licence for one or more uses of water or deposits of waste set out in column I of any of Schedules D to H, where any of those uses or deposits meets criterion set out in column IV of those Schedules.”

¹² <http://mvlwb.com/process/water-licence>. See section 53 of the *Waters Act*, section 13 of the *Waters Regulation*.

¹³ R-019-2014

Sections 41 to 45 of the *Waters Act* set out the requirements for public hearings. Such hearings are held by the appropriate board, depending on the area of the undertaking is located. The Board may hold a hearing if it is satisfied that it would be in the public interest. The Board shall hold a hearing if it involves a Type A licence issuance, amendment, cancellation, or cancellation of a Type B licence. Section 41(3) sets out the hearing exemptions.

All documents related to water licensing in the Northwest Territories are available from the Mackenzie Valley Land and Water Board's public registry.¹⁴ Every file is required to contain: a copy of the application and of all supporting documents; all records from any public hearing held in connection with the application; a copy of any licence issued in respect of the application and the reasons for the decision of the Board in respect of its issuance; and all correspondence and documents submitted to the Board in respect of compliance with the conditions of any licence issued in respect of the application.

Licensing Example: Bluefish Dam: Licence No. MV2005L4-0008 (Renewal of N1L4-0735)

The following description of the licensing document for the Bluefish Dam does not contain a complete description of the contents of the licensing document. Due to time restrictions, only a description of licensing elements that were considered to be most applicable to the LWR hearing was included.

Licensing Authority	Mackenzie Valley Land and Water Board, Bluefish Water Licence Tribunal
Type of Licence	Type A Water Licence
Purpose	Storage and Diversion of Water for a Hydroelectric Power Undertaking and Associated Uses
Term of Licence ¹⁵	15 years (April 3, 2006-April 2, 2021)
Scope	Entitles the Northwest Territories Power Corporation to use, divert and store water from the McCrea River and the Yellowknife River to the Duncan and Bluefish lakes respectively for the Class II hydroelectric power undertaking and associated uses related to the Bluefish Power Generation Facilities.
Conditions	<p>The sections of interest within this licence include:</p> <p>Part B: General Conditions:</p> <ul style="list-style-type: none"> • 5) Meters and devices used for measuring water levels and water flows shall be installed, operated and maintained by the Licensee to the satisfaction of an Inspector. • 6) Requirement to comply with the Surveillance Network Program <p>Part C: Conditions Applying to Studies</p> <ul style="list-style-type: none"> • 1) The Licensee shall submit to the Board for approval Terms of Reference for any studies deemed necessary by the Board during the term of this Licence • 2) The Licensee shall carry out any studies required by the Board according to the Terms of Reference referred to in part C, item 1 as when approved by the Board. <p>Part D: Conditions Applying to Operation</p> <p>This Part sets out the water level requirements.</p> <ul style="list-style-type: none"> • 4) Must install and maintain a guard in accordance with the <i>Fisheries Act</i> • 5) Must submit a Reservoirs Operation Plan • 6) The Licensee shall have detailed geotechnical inspections of all Power Generation Facilities undertaken by a qualified geotechnical engineer registered in the Northwest Territories. These inspections shall take place every four (4)

¹⁴ <http://www.mvlwb.ca/Boards/mv/SitePages/registry.aspx>

¹⁵ *Waters Act*, s. 26(2): Term not exceeding 25 years for Type A licence in respect of a prescribed class of undertakings or a Type B licences; term not exceeding the anticipated duration of the undertaking, in the case of a type A licence other than one that falls within a prescribed class of undertakings

years starting in 2009 when the annual water level in the Yellowknife River is high. The engineer's report shall be submitted to the Board no later than sixty (60) days after the inspection, and shall include a covering letter from the Licensee outlining an implementation plan to respond to any recommendations made by the engineer.

Part E: Conditions Applying to Modifications

- The licensee may, without written approval, carry out modifications to the Water Supply and Waste Disposal Facilities provided that such modifications are consistent with the terms of this License and the following requirements are met: (a to d).
- **3) The Licensee shall provide to the Board as-built plans and drawings of the modifications referred to in this License within ninety (90) days of completion of the modifications.**

Part G: Conditions Applying to Contingency Planning

- The Licensee shall submit to the Board for approval an updated **General Contingency Plan** within six (6) months following the issuance of this Licence. **The General Contingency Plan shall be in accordance with the Canadian Dam Safety Association's "Dam Safety Guidelines"**.¹⁶
- 2) The Licensee shall review the General Contingency Plan annually and, if necessary, revise the General Contingency Plan to reflect any changes in operation or technology. All revisions shall be in accordance with the Canadian Dam Safety Association's "Dam Safety Guidelines" and shall be submitted to the Board for approval.
- 3) The Licensee shall implement the General Contingency Plan identified in part F, items 1 and 2 and notify an Inspector immediately should a failure of any of the structures associated with the Power Generation Facilities occur, or seem likely to occur, which would result in an uncontrolled release of water.
- 4) If, during the period of this Licence, a failure to comply with part D, items 2 and 3 of this Licence occurs, or is foreseeable, the Licensee shall employ the General Contingency Plan referred to in part F, items 1 and 2 and shall notify an Inspector immediately.
- 5) The Licensee shall provide an Inspector with a detailed written report of each event referred to in part F, items 3 and 4. The written report shall be submitted to an Inspector not later than thirty (30) days after initially reporting the event to the Inspector as required under part F, items 3 and 4.
- 6) The Licensee shall review the **Oil Pollution Emergency Plan** annually.

Part J: Conditions Applying to Abandonment and Restoration

- The Licensee shall review the approved Interim **Abandonment and Restoration Plan** annually, and, if necessary, shall revise the Plan to reflect any changes in operation or technology. All revisions to the Interim Abandonment and Restoration Plan shall be submitted to the Board for approval.

Reporting Requirements

Part B: General Conditions:

- **4) Requirements for the Annual Report:** listing of the recorded daily

¹⁶ <http://www.imis100ca1.ca/cda/ItemDetail?iProductID=66d473db-758d-4d7b-be79-fa4f1ba7e3dd&Class=09c61659-a500-41dc-ac03-4dd71a7120b7&WebsiteKey=095d321d-047c-4a88-b37c-1a92165669ca> – Dam Safety Guidelines (must purchase)

	<p>and monthly water levels in metres at Bluefish and Duncan Lakes Dam Reservoirs, computed daily and monthly mean water flows, record of modifications and major maintenance work carried out on the Power Generation Facilities, revisions to the contingency plans, tabular summaries of all data generated under the Surveillance Network Program, list of unauthorized discharges, any other details on water use or operating procedures requested by the Board.</p> <p>Part G: Conditions Applying to Contingency Planning</p> <ul style="list-style-type: none"> • 5) The Licensee shall provide an Inspector with a detailed written report of each event referred to in part F, items 3 and 4. The written report shall be submitted to an Inspector not later than thirty (30) days after initially reporting the event to the Inspector as required under part F, items 3 and 4.
Corresponding Documents	Reservoirs Operation Plan, General Contingency Plan, Oil Pollution Emergency Plan, Abandonment and Restoration Plan
Connection to Legislative Regimes	<i>Mackenzie Valley Resource Management Act</i> - Water Licence can trigger an environmental assessment [see Grandfather Clause Memo]

Strengths of this licensing regime:

The water licensing regime of the Northwest Territories is one of Canada’s strongest. In order to obtain a water licence, the complete lifecycle of the undertaking must be considered, including the possibility of a temporary closing, decommissioning, and abandonment. This is evident in the requirement for such plans in an application for a water licence.¹⁷

There are also a series of other plans required to be submitted with the application and/or approved by the Board throughout the life of the undertaking. Of particular interest is the requirement that the general contingency plan be in compliance with the Canadian Dam Safety Associations “Dam Safety Guidelines”. Other jurisdictions like the Yukon and British Columbia have a similar requirement. The potential environmental effects of such plans, especially for decommissioning, can trigger an environmental assessment under the *Mackenzie Valley Resource Management Act*.

The Northwest Territories have a strong system for co-management that involves a series of different water boards that can issue water licences depending on where the undertaking is located. There are also extensive provisions for public participation and access to licences and corresponding documents. All versions of licences, reasons for decisions, plans, correspondence and other information is available online through the Mackenzie valley land and water board’s electronic registry. Reasons for Decisions are included with all licensing documents and for all other important decisions.

The requirements for reporting contained in the licensing documents are extensive and provision is made so licensing documents and associated plans can be adjusted as monitoring and reporting requirements are submitted. The Board can also require the proponent to undertake studies about the impact of the undertaking.

There are also legislated timelines for the water licensing and approval process [see s. 46 to 52].

B) Yukon:

The legal framework surrounding the issuance of water licences in Yukon is similar to that of the Northwest Territories. The Yukon Water Board is responsible for the issuance of water use licences for the use of water and/or the deposit of waste into water. Water licences are issued for a variety of undertakings.

¹⁷ Waters Regulation, s. 5(2)(h)

The objectives of the Board are to provide for the conservation, development, and utilization of waters in a manner that will provide the optimum benefit from them for all Canadians and for the residents of the Yukon in particular.¹⁸

The Yukon Water Board also has specific responsibilities under the *Yukon Environmental and Socio Economic Assessment Act* ("YESAA").¹⁹ The Board cannot issue a water use licence, or set terms of a licence, that are contrary to a decision document issued under that legislation. For this reason, an application for a water use licence must be accompanied by a decision document issued under YESAA.

Waters Act

In 2003, with the devolution of federal responsibilities to the Yukon, the *Yukon Waters Act* was replaced by the *Waters Act*, which was intended to be mirror legislation.²⁰ The Waters Regulation also sets out the requirements related to the water licensing process.²¹

Yukon Environmental and Socio Economic Assessment Act (YESAA)

YESAA was fully implemented in November 2005, and it applies to every project that requires a water use licence. The YESAA designated office carries out a public consultation process, identifies potentially significant effects, and recommends mitigative terms and conditions to a decision body. The decision body (territorial, federal or first nation governments) can accept, reject or vary the recommendations, and will issue a decision document. The water board licence cannot contradict the decision document.²²

Water Licensing:

The Yukon Water Board is granted the power to issue Type A and Type B water licences under s. 12 of the legislation. Schedule 2 of the *Waters Regulation* sets out the criteria for determining which Type of licence.²³ Water licences under this legal framework cannot have a term exceeding 25 years.

The Board may include in a licence any conditions that it considers appropriate, including conditions:

- relating to the manner of use of waters permitted to be used under the licence;
- relating to the quantity, concentration, and types of waste that may be deposited in any waters by the licensee;
- under which any such waste may be so deposited;
- relating to studies to be undertaken, works to be constructed, plans to be submitted, and monitoring programs to be undertaken;
- relating to any future closing or abandonment of the appurtenant undertaking²⁴

When setting the conditions of a licence, the Board must make all reasonable efforts to minimize adverse effects of the issuance on the licence on: licencees, domestic users, instream users, authorized users, authorized waste depositors, owners of property, occupation of property, holders of outfitting concessions, registered trapline holders, and holders of other rights of a similar nature.²⁵

18 <http://www.yukonwaterboard.ca/role.htm>

19 S.C. 2003, c. 7

20 S.Y. 2003, c. 19

21 YOIC 2003/58

22 <http://www.yukonwaterboard.ca/role.htm>. We note there are proposed changes to YESAA., see Bill S-6 (see links at <http://www.cbc.ca/news/canada/north/kwanlin-dun-drummers-interrupt-premier-at-s-6-hearings-1.3015226>).

23 7.(1) Subject to subsection (2), a licence issued under subsection 12(1) of the Act shall be a type B licence for one or more uses of water or deposits of waste set out in column 1 of any of Schedules 5 to 10, where any one of those uses or deposits (a) meets a criterion set out in column 3 of the Schedule; or (b) meets a criterion set out in column 2 of the Schedule, but does not meet the requirements of paragraphs 4(1)(a) and (b).

(2) A licence issued under subsection 12(1) of the Act shall be a type A licence for one or more uses of water or deposits of waste set out in column 1 of any of Schedules 5 to 10, where any one of those uses or deposits meets a criterion set out in column 4 of the Schedule.

24 *Waters Act*, s. 13(1)

25 *Waters Act*, s. 13(2)

Proponents are required to submit a separate application if a cancellation of a licence is sought under section 10 of the *Waters Regulation*.

Public Hearings, and Access to Licences:

The Board may hold a public hearing in connection with any matter relating to its objects, if it is satisfied that it would be in the public interest.²⁶ The Board is required to hold a hearing when considering the issuance or renewal of a type A licence; an amendment to a type A licence pursuant to which the use, flow, or quality of waters, or the term of the licence, would be altered; the cancellation of a type A licence; or the cancellation of a type B licence²⁷, unless the exemptions found in s. 19(3) apply. A public hearing is held at such place in the Yukon as the Board considers appropriate, and may be adjourned from time to time and from place to place within the Yukon.²⁸

The *Waters Regulation* sets out the requirements for the public registry. Each file is required to contain: a copy of the application and of all supporting documents; all records from any public hearing held in connection with the application; a copy of any licence issued in respect of the application and the reasons for the decision of the Board in respect of its issuance; and all correspondence and documents submitted to the Board in respect of compliance with the conditions of any licence issued in respect of the application.²⁹ Licensing documents are available online on the Waterline Registry.³⁰

The Licensee is required to submit an annual report “setting out the quantity of water used under the licence and the quantity, concentration, and type of any waste deposited under the licence.”³¹ Reporting requirements are also set out in the licensing document.

Licensing Example: Mayo Generating Station and Mayo Lake Dam: Licence No. HY99-012

The following description of the licensing document for the Mayo Generating Station and Mayo Lake Dam does not contain a complete description of the contents of the licensing document. Due to time restrictions, only a description of licensing elements that were considered to be most applicable to the LWR hearing was included.

Licensing Authority	Yukon Territory Water Board
Type of Licence	Type A Water Licence (Power, Class 2)
Purpose	Operation of the Mayo Generating Station and the Mayo Lake Dam
Term of Licence	25 years (January 1, 2001-December 31, 2025)
Scope	Water Use
Conditions	<p>The sections of interest within this licence include:</p> <p>Part A: General Conditions</p> <ul style="list-style-type: none"> • 3. No term of this licence limits the application of any other Federal, Territorial or First Nation Law • 6. Subject to the provisions of this licence, deleterious substances shall be used, transported, stored and disposed of in such a manner that they are not deposited in, or allowed to be deposited in, any waters. • 16. Spills and Unauthorized Discharges • 17. Hazardous Materials Storage <p>Part B: Operating Conditions</p> <ul style="list-style-type: none"> • 18-21: flow levels, water surface elevation • 22. Requirement to carry out annual dam safety monitoring inspectional of all water management structures associated with the Mayo Lake Dam,

26 *Waters Act*, s. 19(1)

27 *Waters Act*, s. 19(2)

28 *Waters Act*, s. 19(4)

29 *Waters Regulation*, s. 13(2)

30 <https://apps.gov.yk.ca/prod/waterline/f?p=127:1:>

31 *Waters Regulation*, s. 14(1)

	<p>Wareham Dam and Mayo Generating Station. The inspection shall be carried out by a qualified professional engineer licenced to practice in the Yukon, and shall follow the recommendations contained in the most current edition of the <i>Canadian Dam Safety Guidelines</i>.</p> <ul style="list-style-type: none"> • 25. All works associated with this licence shall be maintained by the Licensee in good order, consistent with sound engineering and environmental practices. • 26. By no later than December 31, 2001, the Licensee shall implement a streamflow monitoring system downstream of the Mayo Lake and Wareham Dams as recommended in the <i>Dam Breach Flood Inundation Study for Wareham Dam</i>. [exhibit 1.8.3 to water use application HY99-012]
Reporting Requirements	<p>Part A: General Conditions</p> <ul style="list-style-type: none"> • 9. All reports shall be submitted to the Board in an unbound printed form that is reproducible by standard photocopier and shall be accompanied by five (5) copies • 10. All monitoring data and reports shall be submitted in digital form on diskette using an IBM compatible format readable using commonly available software. • 11. Annual reports shall be submitted to the Board by the Licensee. The initial report shall cover the period from the effective date of this licence to March 31, 2001. Subsequent reports shall cover the period from April 1 to March 31 of each year and shall be submitted to the Board on or before May 31 in the year in which the reporting period ends. • 12. Annual reports shall include the information required by this licence and by the Regulations, including, but not necessarily limited to: monthly maximum and minimum of the mean daily water levels on Mayo and Wareham lake; monthly maximum and minimum of the mean daily water flows through the gates of the Mayo Lake Dam; monthly maximum and minimum of the mean daily flows through the Mayo Generating Station turbines; monthly maximum and minimum of the mean daily flows through the Wareham Dam spillway; information regarding the purpose, nature and extent of any significant maintenance work carried out; and any other information or reports required by this licence or the Regulations. • 12/13 Quarterly reports required. Conditions: mean daily water levels on Mao lake and Wareham lake; mean daily flow through the gates of the Mayo Lake Dam; mean daily flows through the mayo Generating Station turbines; main daily flows through the Wareham Dam spillway; and any other information or reports required by this licence or by the Regulations • 14. Dam Safety Monitoring Reports. Annual dam safety inspection and monitoring reports are required. Required information: monitoring instrumentation readings for the previous year; graphical and/or tabulated historic data for the monitoring instrumentation; notes of visual observations; analysis of the data and observations; and recommendations for any additional monitoring or actions arising from the results of the monitoring. • 15. Every five years, or more frequently if recommended as a result of any dam safety inspection, the Licensee shall submit a report detailing the results of a comprehensive dam safety review. Required information: monitoring data, notes of observations, analysis of the data and observations, and recommendations for actions arising from the analysis
Corresponding Documents	Material filed as application HY99-012

Strengths of this licensing regime:

The Yukon's water licensing regime is similar to that of the Northwest Territories and shares similar strengths. There are extensive reporting requirements and undertakings are required to undergo an annual dam safety inspection, and undertake a comprehensive dam safety review at least every five years. Such inspections must comply with the Canadian Dam Safety Associations "Dam Safety Guidelines". Licensing documents are readily available online.

There is a strong legislative connection to the environmental assessment process.

C) British Columbia

Water Act³²

In British Columbia, the water licencing process is set out by the *Water Act* and the *Water Regulation*.³³ Only those who are registered under the *Water Protection Act* can divert, extract, use or store any water from a stream.³⁴ A water licence issued under this Act entitles its holder to divert and use beneficially, for the purpose and during or within the time stipulated, the quantity of water specified in the licence; store water; construct, maintain and operate the works authorized under the licence and necessary for the proper diversion, storage, carriage, distribution and use of the water or the power produced from it; alter or improve a stream or channel for any purpose; construct fences, screens and fish or game guards across streams for the purpose of conserving fish or wildlife.³⁵

Two types of water licences are issued in BC: Condition and Final. This is comparable to Manitoba's Interim and Final Licences. Final Licences are issued when the time for completing the works authorized under a conditional licence or the licensee completes the works.³⁶

See Part 4 of the *Water Regulation* for the sections related to Power Developments.³⁷

Comptroller

s.1 "comptroller" means a person employed by the government or a government corporation and designated in writing by the minister as the Comptroller of Water Rights and includes any persons designated in writing by the minister as acting, deputy or assistant comptrollers.

The comptroller has the power to refuse an application for a water licence, amend an application, grant all or part of an application, require additional plans or other information and issue to the applicant one or more conditional or final licences on the terms the comptroller or regional water manager considers proper.³⁸ Resource management plans can restrict the issuance of water licences.³⁹

Water Management Plan

Since water use rights have priority in the order that the licences were issued, the minister may, by order, designate an area for the purpose of developing a water management plan if the minister considers that a plan will assist in addressing or preventing:

- conflicts between water users
- conflicts between water users and instream flow requirements,
- risks to water quality.⁴⁰

32 RSBC 1996 c. 483

33 BC Reg 204/88 – this regulation deals mainly with rental fees

34 RSBC 1996, c 484, see section 4 of the *Water Act*.

35 *Water Act*, s. 5

36 *Water Act*, s. 14(1)

37 *Water Regulation*, s. 14 to 23

38 *Water Act*, s. 12

39 *Water Act*, s. 12(1.3)(c)

40 *Water Act*, s. 62

The minister may consider concerns related to fish, fish habitat and other environmental matters when deciding when to make such an order.⁴¹

Anyone making a change to a stream for the purposes of a water development are required to take into consideration the protection of water quality and the protection of habitat.⁴²

An existing water licence may be amended under the Water Act for several reasons some of which include:

- Apportionment
- Change of Works
- Change of Purpose
- Extension of Time
- Extension of Term
- Transfer of Appurtenancy
- Abandonment⁴³

Public Hearings, and Access to Licences:

The Comptroller or regional water manager has the authority to hold a public hearing if an objection to the granting of an application is received.⁴⁴

Water licences can be accessed online.⁴⁵

Licence Example: Bridge River Generating Station - Licence No. F126250

The following description of the licensing document for the Bridge River Generating Station does not contain a complete description of the contents of the licensing document. Due to time restrictions, only a description of licensing elements that were considered to be most applicable to the LWR hearing was included. Please see the attached licensing documents for more information.

Licensing Authority	Comptroller of Water Rights
Type of Licence	Final Water Licence
Purpose	Power – generated at Bridge River generating station BR2
Term of Licence	March 30, 2011 – March 30, 2051 [40 years]
Scope	Divert and Use Water
Conditions	c) the date from which this licence shall have precedence is January 18, 2011 e) maximum rate at which water may be diverted and used g) this licence is appurtenant to the undertaking of the British Columbia Hydro and Power Authority to generate power from Bridge River generating station i) licensee must operate the works authorized in accordance with an order of the Comptroller that: i) sets vales for parameters and procedures for operation of the works which are based on the Bridge River Water Use Plan; ii) requires a monitoring program to evaluate the effectiveness of the regulation of the works as ordered; iii) amends the parameters and procedures ordered above in consideration of the results of the monitoring program and any subsequent Bridge River Water Use Plans
Reporting Requirements	None in Licence
Corresponding Documents	Water management plans

41 *Water Act*, s. 62(2)

42 *Water Act*, s. 41 and 42

43 http://www.env.gov.bc.ca/wsd/water_rights/licence_amendments/index.html

44 *Water Act*, s. 11(1)

45 http://a100.gov.bc.ca/pub/wtrwhse/water_licences.input

Strengths of this Licensing Regime

The current water licensing process in British Columbia is not especially impressive. Licences issued under this regime are quite basic and less extensive than Manitoba's licences. However, the new water licensing legislation – the *Water Sustainability Act* – will impose significant improvements on the process. A brief discussion of some of the perceived strengths of this new legislation is below. Since this new legislation will not be in force until 2016, there are no licensing documents yet available. Therefore the example documents were issued under the current or pre-existing regimes.

One potential strength (depending on how such power is exercised) is the discretionary powers granted to the comptroller or regional water manager. Such powers include the ability to make orders that can be applied to the licensed undertaking, impose monitoring requirements, and the ability to adjust the operation of the undertaking based on the results of monitoring [adaptive management].

Based on the historic conditional licence⁴⁶ provided for our review, it appears that conditional licences contain more extensive requirements than final licences. This includes requirements for wildlife and fishery management and protection, and the development of environmental enhancement programmes. This is likely to ensure that the construction of developments that will alter water regimes is undertaken in a way that minimizes adverse environmental effects. The more extensive requirements of the historic conditional licence vs. newer licences may be due to the lack of an environmental assessment regime at the time, which meant that environmental effects needed to be addressed by the water licensing regime.

What is particularly strong about the current regime, which seems will continue when the new legislation is in force, is the application of water management plans to the licensing regime.

Water Sustainability Act⁴⁷

Since the development of this new legislation has occurred over many years and has involved extensive engagement with the public, first nations, and other interested parties. This means that there are a large number of documents and articles that discuss this new legislation and its potential impact. There is also a number of criticisms made about the new regime.

Further research on this new legislation may be helpful.

Some of the perceived strengths of the new regime include provisions:

- to make all licences reviewable after 30 years⁴⁸;
- to include public consultation in any licence reviews, setting of water objectives, setting of environmental flows, creation of area based regulation, and establishing of water efficiency standards;
- that explicitly include local watershed governance arrangements in the list of possible decision-makers under the Act;
- that authorize the establishment of water objectives and requirements that water objectives be considered in decision making under this and other enactments;
- that provide new powers to be applied when streams are at risk of falling or have fallen below their critical environmental flow thresholds to modify the existing precedence of water use for the purpose of protecting the aquatic ecosystem of streams and aquifers and essential domestic uses;
- new mitigation measures [see section 16].

46 Conditional licence no. 47215, Revelstoke Dam, 1976

47 <http://engage.gov.bc.ca/watersustainabilityact/the-proposal/>; http://leg.bc.ca/40th2nd/3rd_read/gov18-3.htm;
<http://ourwaterbc.ca/wsa-legve-proposal/bcs-new-water-sustainability-act-getting-it-right>

48 See section 23 of the new Act.

D) Alberta

Alberta's *Water Act* and *Water (Ministerial) Regulation*⁴⁹ requires that an approval and/or licence be obtained before undertaking a construction activity in a water body or before diverting and using water (surface water and groundwater).⁵⁰ The Director is responsible for issuing approvals and licences under the Act. An approval provides authority for constructing works or for undertaking an "activity" within a water body. The approval will include conditions under which the construction or "activity" must take place. A licence provides authority for diverting and using surface water or groundwater. The licence identifies the source of water supply, the location of the diversion site, an allocation of water to be diverted and used from the source, the priority of the "water right" established by the licence, and the conditions under which the diversion and use must take place.⁵¹ Under the *Water Act*, a licence is required for the use of water for energy development.⁵²

The purpose of the *Water Act* is to support and promote the conservation and management of water, including the wise allocation and use of water, while recognizing the need to manage and conserve water resources to sustain our environment and to ensure a healthy environment and high quality of life in the present and the future; the need for Alberta's economic growth and prosperity; the need for an integrated approach and comprehensive, flexible administration and management systems based on sound planning, regulatory actions and market forces; the shared responsibility of all residents of Alberta for the conservation and wise use of water and their role in providing advice with respect to water management planning and decision-making; the importance of working co-operatively with the governments of other jurisdictions with respect to trans-boundary water management; the important role of comprehensive and responsive action in administering this Act.⁵³

Water licences can be issued for a number of different purposes: municipal; agricultural; irrigation; commercial; industrial; water power; dewatering; management of fish and wildlife; implementing a water conservation objective; habitat enhancement; recreation; water management; any other purpose specified by the Director.⁵⁴

Sections 46-61 of the *Water Act* set out the requirements for applying, obtaining, amending, suspending, and cancelling a licence. When making a decision about issuing a licence the Director must consider "the matters and factors that must be considered in issuing a licence, as specified in an applicable approved water management plan" and may consider any existing, potential or cumulative effects on the aquatic environment, hydraulic, hydrological and hydrogeological effects, and effects on household users, other licensees and traditional agriculture users.⁵⁵ The Director may also consider effects on public safety, with respect to irrigation, the suitability of the land for irrigated agriculture, and any other matters applicable to the licence that in the opinion of the Director are relevant, including any applicable water guideline, water conservation objective and water management plan.⁵⁶

Section 12(1) of the Regulation sets out the applicable licence expiry dates. When there is an applicable water management plan, the expiry date is determined based on the requirements set out by the plan. When there is no applicable water management plan, the Director must issue a licence with an expiry date of 10 years, or less than 10 years if the applicant has requested less in the application or the duration of the project is less than ten years.⁵⁷

The Director must consider any one or more of the following criteria in determining whether the expiry date of a licence may be longer than 10 or 25 years: any applicable approved water management plan or water

49A.R. 205/1998

50 RSA 2000, c W-3, s. 49

51 <http://environment.gov.ab.ca/info/library/7511.pdf>

52 <http://www.aer.ca/applications-and-notice/application-process/water-act#sthash.v9Y79KoZ.dpuf>

53 *Water Act*, s. 2

54 *Water (Ministerial) Regulation*, s. 11

55 *Water Act*, s. 51(4)

56 *Water Act*, s. 51(4)(c)

57 *Water (Ministerial) Regulation*, s. 12(2)(a)(b)

guideline; the purpose of the licence; the specific location of the diversion of water; the area of the Province in which the diversion of water is located; the lifespan of any technology related to the diversion of water or a works; the expected duration of the project; any potential positive and negative social and economic impacts of the proposed diversion of water; any potential impact on the aquatic environment or a water body; any existing policies and guidelines of the Department; any other matters the Director considers relevant.⁵⁸

Connection to environmental assessment requirements:

Unless the regulations provide otherwise, the Director may not issue a licence if Part 2, Division 1 of the *Environmental Protection and Enhancement Act* [environmental assessment process] has not been complied with.⁵⁹ Unless the licence is required by the proponent to comply with this same section.⁶⁰

Public Hearings, and Access to Licences:

Section 15(1) of the Regulation sets out the documents and information that are required to be disclosed to the public.⁶¹ Such documents include, but is not limited to:

- information, applications, plans and specifications that are provided to the Department as part of an application;
- verified monitoring data and the processing information that is necessary to interpret that data, that is provided by an approval holder or licensee in accordance with a term or condition of the approval or licence, or the Act or this Regulation;
- any reports or studies that are provided to the Department in accordance with a term or condition of an approval, preliminary certificate or licence, or the Act or this Regulation;
- statements of concern;
- emergency preparedness plans;
- approved water management plans;
- verified monitoring data and the processing information that is necessary to interpret that data;
- licences.

Water Licences are available online through the Water Allocation Licence Viewer.⁶²

Licence Example: Pocaterra Power and Power Storage Development – Licence F09291-A

The following description of the licensing document does not contain a complete description of the contents of the licensing document. Due to time restrictions, only a description of licensing elements that were considered to be most applicable to the LWR hearing was included.

Licensing Authority	Controller of Water Resources
Type of Licence	Final Licence
Purpose	Power and storage, use and occupancy
Term of Licence	No Expiry Date [issued under old legislation – <i>Water Resource Act</i>]
Scope	Impound, divert, store and use all the waters of the Kananaskis River and its tributaries
Conditions	7. Notwithstanding any rights granted or approval given by this Final Licence, the Licensee shall also comply fully with the provisions of any statutes or regulations of the Province or of Canada governing the preservation of the purity of waters or governing logging, forestry, fishing , or other interests present or future which might be affected by any operations conducted under this Final Licence and shall also observe and carry out any instructions of the Minister in respect of any of the foregoing matters not inconsistent with the said statutes and regulations.

58 *Water (Ministerial) Regulation*, s. 12(4)

59 *Water Act*, s. 16(1)

60 *Water Act*, s. 16(2)

61 *Water (Ministerial) Regulation*, s. 15

62 http://ssrb.environment.alberta.ca/licence_viewer.html

	<p>Schedule A – construction plans</p> <p>Schedule C 13(2)(c) improve the land occupied from the point of view of landscape architecture</p> <p>14 The Director may require the licensee to install and maintain in good operating condition at the places and in the manner that the Director approves accurate meters, measuring weirs, gauges or other approved devices that are adequate for determining</p> <p>a) the amount of water used or power developed in the operation of the works, b) the flow of the stream from which water is or will be diverted, and c) the amount of water held in or drawn from storage</p> <p>and the licensee shall keep accurate and satisfactory records of the determinations and make the returns, supported if necessary by statutory declaration, that the Director requires.</p>
Reporting Requirements	None
Corresponding Documents	Schedule A – construction plans

Strengths of this licensing regime:

The licensing example that was used from Alberta was issued under previous legislation – the *Water Resources Act*. We were not able to find an example issued under the current legislation. Therefore it does not reflect some of the perceived strengths of the current legislation.

One such strength are the provisions for determining the expiry date of a water licence [s. 12]. There is a strong connection to the environmental assessment process. The Act also contains extensive decision-making criteria. There are also strong requirements for the disclosure of licensing and related documents.

The interaction of water licensing, water management planning, and environmental assessment is particularly impressive.

4. Conclusion

This review of water licensing regimes in Canada has highlighted some improvements that could potentially be made to Manitoba’s water licensing regime under *The Water Power Act*. Such improvements may include:

- stronger reporting requirements
- stronger planning requirements – ex. NWT
- shorter licensing terms and stronger review provisions
- legislative connections to environmental assessment, water management and water protection regimes
- a central public registry accessible in hard copy and electronic format

While legislative amendments may not help with the immediate issue of the LWR Final Licence, there is provision within the current legal regime that could allow for some of these improvements as terms of the Final Licence. Section 44 of the *Water Power Regulation* sets out that “the final licence shall embody the terms which were set out in the interim licence for incorporation into such final licence, and **such other terms and conditions, as the minister may impose**”.

What has become clear from this preliminary legislative review of water licensing regimes is that they are intended to have a very limited scope: largely the regulation of water levels, flows, potential land and water use, and applicable rental fees. Water management and protection is generally left to other legislation that is given priority over the water licensing regime. Language that establishes this priority and a requirement for compliance by the licensee with such protection mechanisms should be used. It appears that the water licensing regimes have developed with reliance on environmental assessment regimes to determine the

potential environmental effects and establish mitigation and protection mechanisms. Legislative connections should be developed. Strong monitoring and reporting mechanisms in all of these related legislative regimes assist with maintaining these connections and to understand the potential impacts of the water development.