

Inter-basin Transfers

Water Availability Engagement



Population growth, economic growth and water variability are challenging the water management system in Alberta. New policy and regulatory tools could be used to increase water availability for Albertans and optimize the water management system to better address these issues while continuing to protect the aquatic environment.

This document provides background information on just one type of water management opportunity identified through conversations with stakeholders. It is intended to spark ideas and generate conversation.

The Government of Alberta invites your feedback on any opportunity to increase water availability in the province.

What are inter-basin transfers?

Under Alberta's *Water Act*, an inter-basin transfer is a water licence that allows water from one major river basin to be used in another major river basin. A river basin is a watershed that collects all precipitation, surface runoff and sources of groundwater to generate the streamflow seen in rivers, streams, lakes and wetlands.

Rivers in the Hay basin, the Peace/Slave basin and the Athabasca basin flow to the Arctic Ocean. Rivers in the Beaver basin, the North Saskatchewan basin and the South Saskatchewan basin flow to Hudson Bay. Flows in the Milk basin eventually reach the Gulf of Mexico.

Alberta has seven major river basins defined in the Act:

- Peace/Slave River basin
- Athabasca River basin
- North Saskatchewan River basin
- South Saskatchewan River basin
- Milk River basin
- Beaver River basin
- Hay River basin



Current situation

When the *Water Act* was passed in 1999, it included a provision (section 47) requiring that before any licence for an inter-basin transfer of water could be issued it had to be approved by the Legislature by passing a special Act.

Section 47: A licence shall not be issued that authorizes the transfer of water between major river basins in the Province unless the licence is specifically authorized by a special Act of the Legislature.

Putting this requirement into the Act reflected public concerns that came up in consultations for the new *Water Act* around the idea of bulk water transfers. These concerns also resulted in a separate provision (section 46) requiring a special Act of the Legislature be passed before issuing a licence that will transfer water outside of Canada.

Special Act of the Legislature

Obtaining a special Act of the Legislature is a multi-step process. First, an application is received signifying a transfer of water between basins is being requested. Alberta Environment and Protected Areas (EPA) works with the applicant and with decision makers to assess whether government would accept the application and be willing to proceed with a special Act process. If so, the applicant is required to conduct public consultation outlining the proposed project, and submitted findings are reviewed. The Minister determines if public consultation was adequate or if additional consultation is required. If consultation is adequate, and other conditions are met, a special Act is then drafted for review and decision by Cabinet. The Bill must be introduced into the legislature where it is debated and, if passed, is granted royal assent, becoming law.

The purpose of the passing the special Act is to give the Director under the *Water Act* – who is the decision maker on licence applications – the authority to issue the inter-basin transfer licence.

The licence application has gone through all the regular requirements of a standard application, but with added oversight and the information/analysis needed to ensure the issues that can happen with an inter-basin transfer of water were addressed.

Passing a special Act is the way Alberta demonstrates the licence is in the public interest, because the elected officials, as representative of Albertans, have given their approval.

The opportunity

The *Water Act* does not prohibit inter-basin transfers, however it does require they first be authorized by a special Act of the Legislature. Since 1999, six special Acts have been passed, all for regional pipelines carrying municipally treated drinking water.

Various other relatively straightforward proposed inter-basin transfers have not proceeded because of the extra burden and complexity of seeking a special Act.

EPA could consider identifying criteria and thresholds for inter-basin transfers that pose a low risk to the environment and other users, where a special Act would not have to be passed by the Legislature to issue the licence.

If inter-basin transfer requirements were changed to recognize low risk types of transfers, licences will still be required for using and moving water, including all necessary application requirements, regulatory review, and opportunity for public notice and appeal. There will always be an evaluation for impacts to the environment and other water users, including any conditions for diverting, using and returning any water back to the environment.

Right now, whether 50 cubic metres or 50 million cubic metres of water is applied for, these amounts must be approved by the Legislature even though the potential impacts and consequences are completely different.

EPA is not considering any changes to Section 46 of the Act, which requires a special Act to issue a licence proposing to transfer water outside of Canada.

Managing environmental impacts

Any licence under the *Water Act*, regardless of volume, requires applications to be evaluated for impacts to the aquatic environment and to other water users. Applicants must provide an adequate assessment of potential impacts. The amount applied for is always evaluated against water availability, and environmental flow needs are incorporated into conditions of the licence.

Similarly, if water quality, aquatic organisms, invasive species or disease/pathogens are issues of concern, these considerations are factored into decisions and a licence will include conditions to prevent adverse impacts. Alternatively, a licence may not be issued at all if the risks cannot be adequately mitigated.

Examples of potential inter-basin transfers

Scenarios where inter-basin transfers may be appropriate:

- Treated municipal (potable) water supply, for example regional water lines/systems. Drinking water is high quality and poses little risk to people or the environment, particularly when piped between municipalities.
- The special Act requirement does not distinguish between surface and groundwater sources. Aquifers typically yield much less water than surface water sources. A separate, lower amount could be created to define a low-risk groundwater threshold.
- If a project or operation is located on both sides of a major river basin boundary. If the project were located anywhere else, the licence would be relatively straightforward.
- Treated wastewater is increasingly being considered as an alternative water source (water reuse/water recycling). Reusing treated wastewater can avoid taking new water from a natural water body, reducing net environmental impact and could provide a net benefit even in an inter-basin transfer context. EPA could formalize existing policy rules allowing treated wastewater transfer between major basins.

Comparing Alberta's approach to other places

Rules for inter-basin types of water transfers differ across other Canadian jurisdictions reviewed.

Most places recognize significance and potential concern and have developed one or more special rules for them. However, it does not seem the situation arises very often in any jurisdiction, so it's not clear how often the different rules have to be implemented or used.

Like Alberta, in Saskatchewan and British Columbia inter-basin transfers are generally allowed within provincial boundaries, but unlike Alberta these can be approved by a provincial regulator (i.e., they do not require special legislation). However British Columbia does have an upper limit on allowable transfers, and prohibits any large inter-basin transfers. So, while Alberta requires a special Act, we don't impose any other specific limitation on proposed transfers.

Inter-basin transfers are not allowed in Manitoba or Ontario, with very few exceptions (e.g., small amounts/defined purposes like bottled/package water; and in certain emergencies).

We want to hear from you

Consider these questions on inter-basin transfers before providing your feedback:

- Where, or under what circumstances, might inter-basin transfers be appropriate or necessary? When are they not appropriate or necessary?
- What criteria might be applied to support evaluation of inter-basin transfers (e.g., volume threshold, or identified low-risk or other practical circumstances such as regional potable water systems or water for projects that happen to straddle two major river basins)?
- Are there impacts or benefits of removing the requirement of a special Act of the Legislature for some inter-basin transfers?
- Could certain decisions to support some inter-basin transfers be made by the Cabinet or by others instead?

Get engaged

Learn more about the Water Availability engagement and have your say at alberta.ca/water-availability-engagement