

# 2024 Water Sharing Memorandum of Understanding – Bow River Basin

This Water Sharing Memorandum of Understanding (“MOU”) applies for the period of April 1 to December 31, 2024; the MOU is no longer in effect after this time period.

A Party’s participation in this MOU is voluntary and this MOU is not legally binding. The MOU is not a regulatory instrument of the *Water Act* and does not amend the terms of any underlying *Water Act* licences.

The Parties recognize that any action or omission by a Party under or pursuant to this Water Sharing MOU is voluntary and does not operate to bind, sever, or limit a Party’s entitlements under its water licences, and nothing in this Water Sharing MOU operates to amend or surrender any water licence or part thereof. Any Party to this MOU may withdraw from the MOU immediately upon written notice to the other Parties hereto, without penalty or further obligation.

The Government of Alberta (GOA) Water Sharing Memorandum of Understanding Operational Support document (March 28, 2024) is intended as a companion document to this MOU.

Amendments to this Water Sharing MOU require written acknowledgement of all the Parties hereto.

No Party will make a public statement naming another Party regarding this MOU without gaining prior consent from the named Party.

## Parties Involved

Bow River Irrigation District (“BRID”)

City of Calgary

Ducks Unlimited Canada

Eastern Irrigation District (“EID”)

Nutrien Ltd. (“Nutrien”)

TransAlta Alberta Hydro (“TransAlta”)

Western Irrigation District (“WID”)

(collectively, the “Parties” and individually, a “Party”)

## Purpose of Water Sharing MOU

- This Water Sharing MOU sets the Parties' commitment to:
  - Continue collaborating voluntarily to manage prolonged drought at a basin level.
  - Continue collaborating, with GOA support, to define criteria and/or basin conditions to consider voluntary activation of water use reductions.

- Where practical, to take steps to enact the water restriction commitments outlined in this MOU if and when the agreed criteria and/or basin conditions are met for activation of this MOU.
- Establish a cooperative and voluntary Water Sharing MOU in pursuit of more users having some water by having many users take less water.
- Encourage flexibility between licence holders to balance competing interests and priorities in the event of water shortages.
- Allow large water licence holders to coordinate their approach to water sharing through their voluntary, non-binding commitments to reduce water use, as outlined in this Water Sharing MOU.

## Considerations for Activation/Deactivation of Water Sharing MOU

- The Parties will collaboratively decide to activate or deactivate the Water Sharing MOU based on the criteria below assessed at regularly scheduled sub-basin meetings. The Parties and GOA will endeavor to meet at a sub-basin level routinely starting in April 2024 to discuss basin conditions, with the meeting cadence changing as environmental and water management conditions evolve. Criteria to be considered in relation to activation or deactivation of this Water Sharing MOU include:
  - Current reservoir storage, minimum winter reservoir storage, and reservoir storage to support late season and winter flows through Calgary.
  - Observed and forecast river flows, with consideration for instream objectives (IO).
  - Expected river flow timing (both managed and unmanaged).
  - Water supply and demand, as seen below:

Water Supply Outlook (March to September), released by the River Forecasting Centre	<	Environmental Flows <sup>1</sup> on the Main Stem + Irrigation District Demands + Private Irrigation Licences + First Nation Licences + Small Municipal Demands + Large Municipal Demands + Industrial Demands
<sup>1</sup> Environmental flows refer to the IO downstream of Bassano Dam		

## 2024 Water Sharing MOU Principles

- Regular communication between the GOA and the Parties under this Water Sharing MOU is a key component to the success of this effort.
- **Municipalities.** Municipalities which have been engaged in the collaborative Water Sharing MOU development have committed to implementing drought response measures which are anticipated to result in a reduction in water use of 5-10% compared to expected 2024 summer demands (maximum from May to October) if no measures were actioned.
  - Municipalities which have been engaged in the collaborative Water Sharing MOU development across the South Saskatchewan River Basin (SSRB) will strive for common actions and outcomes, depending on the needs of each basin.

- **Industry, excluding TransAlta.** Industry which has been engaged in the collaborative Water Sharing MOU development has committed to withdrawing the minimum volume of water needed to maintain safe, reliable operations while continuing to pursue conservation opportunities that meet operational needs and business needs.
- **Irrigation Districts.** Once other system demands have been accounted for, including municipal use, First Nations use, and industrial use, the Irrigation Districts in any given basin will share the remaining water volume, within their licenced allocation, based primarily on acres.
- The Parties recognize that the ability of any Party to this Water Sharing MOU that participates in the electricity market through the storage and retention of water is constrained by the Alberta Electric System Operator’s (“AESO”) rules, especially during times of high electrical demand. The Parties, to whom such rules apply, must offer all their available capacity under the AESO rules into the wholesale electricity market and must comply when called on by the AESO to provide service. As such, during the term of this MOU, some of the Parties may not be able to comply with their commitments below if they are required to use water in order to comply with the AESO rules.

## Commitment of Parties Involved

In the event that the Water Sharing MOU is activated in 2024, based on “Considerations for Activation/Deactivation of Water Sharing MOU”, the Parties agree to the following:

### All Parties

Each Party to this Water Sharing MOU commits to not call priority pursuant to the terms of its water licence if the terms of this Water Sharing MOU are met.

### City of Calgary

The City of Calgary will commit to the implementation of City of Calgary drought response measures, which are anticipated to result in a reduction in water use of 5-10% compared to expected 2024 summer demands (maximum from May to October) if no measures were actioned.

### Ducks Unlimited Canada

Ducks Unlimited Canada will continue to actively manage its licences in collaboration with irrigation districts in the Bow River sub-basin in support of Alberta’s water management objectives including flood and drought management while continuing to pursue conservation opportunities.

### Nutrien Ltd.

Nutrien Ltd. will commit to using no more than 60% (annualized) of its annual licenced water volume from the Bow River.

### TransAlta

This section applies to TransAlta-controlled storage in the Bow River, and specifically excludes any storage managed by the GOA under the 2016 Water Management Services Agreement (“2016 Agreement”) between TransAlta and GOA. TransAlta will continue to cooperate with the GOA to

optimize overall storage in the basin for flood and drought risk mitigation per the terms of the 2016 Agreement.

TransAlta recognizes the environmental issues that can occur on the Bow River at low water flows, in particular with effluent dilution issues downstream of the City of Calgary, in addition to potential impacts on riparian ecosystems, and will work with the GOA (and their storage within the TransAlta system) and other water users to achieve acceptable minimum flows throughout the year to the extent possible. To achieve this, TransAlta will endeavor to fill reservoirs as early in the season as possible when excess water is available in the system (note that these actions risk spilling if there is a late season storm event) while maintaining acceptable flood risk mitigation and with the expectation that there will be limited water available to put into storage during peak irrigation season. In September, TransAlta will collaborate with the Irrigation Districts based on storage volumes within the Irrigation Districts and storage volumes within TransAlta's reservoirs to ensure there is sufficient water in storage for the late fall and winter, including sufficient quantities of storage to satisfy predicted instream environmental flow needs and emergency power demands.

### **Bow River Irrigation District, Western Irrigation District, Eastern Irrigation District**

Once other system demands have been accounted for, including municipal use, First Nations use, and industrial use, the three Irrigation Districts in the Bow River Basin will share the remaining water volume, within their licenced allocation, primarily based on acres, while considering other water users supplied by Irrigation District systems under their own licences. Based on this principle the three Irrigation Districts agree to manage the water available to the districts among themselves; Irrigation District boards will decide on how the volumes will be allocated.

Irrigators will continue to operate according to agreed-on operating strategies.