Water Sharing Agreement Meeting Report – June 20, 2024

This report summarizes the outcomes of the Water Sharing Agreement meetings on June 20, 2024. The meetings enable MOU signatories to discuss basin conditions in real time and make collaborative water sharing decisions. A workbook including stream flows, weather data and reservoir status that informed the MOU decision making process can be found at alberta.ca/drought.

Oldman South Saskatchewan River Basin and Southern Tributaries Combined

Water Sharing Agreement Activation Status

Based on conditions in the basins, operational needs and other considerations, the MOU Signatories in both the Oldman South Saskatchewan River Basin and the Southern Tributaries have made the unanimous decision to maintain the activation of the Water Sharing Agreements as decided on May 9th, 2024.

Basin Conditions Summary

Streamflows in the basins are below normal but all instream objectives on mainstream rivers are being met. Snow pillows affecting the basin are largely depleted, and melt patterns are occurring in the normal range. Reservoir levels are stable and most key reservoirs are within normal range. The Oldman Reservoir level remains lower than the normal range for this time of year. The reservoir level is being managed to maximize storage – the level is rising, but at a slower rate than previous weeks, due to reduced precipitation and increasing demand.

On June 17th, the St Mary Siphon in Montana experienced a catastrophic failure. Environment and Protected Areas is in the process of analyzing the potential impacts of this infrastructure failure on streamflows in the St. Mary River and Milk Rivers in Alberta.

Environment and Climate Change Canada's long-range forecast indicates temperatures above normal (province-wide) and precipitation below normal (Southern Alberta) from June-August. Signatories continue to monitor conditions, meet bi-weekly, and are prepared to adjust if conditions worsen.

Drought Management Metrics

- 1. Instream Objectives
 - All mainstem instream objectives in the basins are being met.
- 2. Shortages¹
 - There are no reported shortages in the basins.

¹ For the purposes of this report, shortages refer to impacts on MOU signatories beyond projected demand.

3. Reservoir levels (as of June 20)

 Most reservoir levels in the Oldman River and Southern Tributaries Basins are within or above normal levels, with a few exceptions (including Oldman Reservoir). Levels have mostly increased in the last two weeks.

Type of managed reservoir	Reservoir name	Normal storage (%)	Current storage (%)	Comments
GoA	Oldman Reservoir	92-98	86	4% increase from last week
GoA	Keho Reservoir	92-99	94	4% increase from last week
GoA	Chain Lakes	100	100	No change from last week
GoA	Pine Coulee	76-99	79%	1% increase from last week
GoA	Waterton	77-93	94	4% increase from last week
GoA	St. Mary	82-84	83	4% increase from last week
GoA	Payne Lake	84-95	94	No change from last week
GoA	Milk River Ridge	82-97	100	7% increase from last week
Private	Chin Reservoir	78-94	57	2% increase from last week
Private	Murray	69-77	63	1% decrease from last week
Private	40 Mile	95-99	51	1% decrease from last week

In response to water supply risk in the Oldman River Basin, Government of Alberta has temporarily adjusted operations of the Oldman River Dam. Effective as of May 9th until June 30, 2024, or until the reservoir reaches the normal operating range for this time of year, the amount of water released from the reservoir has been reduced to meet downstream requirements as much as possible, while prioritizing dam storage. This is resulting in a steep recovery of reservoir levels, with storage levels now beyond the spillway crest, but still below normal levels for this time of year.

Summary of Management actions by MOU signatories

Irrigation districts

All irrigation districts in the basins are communicating that there is a reduced farm gate allocation of 8 inches per acre for the 2024 season, representing approximately 50% reduction from normal. Irrigation demand has started to rise in line with normal seasonal patterns and is expected to increase significantly in the coming weeks as temperatures rise. In some irrigations districts, recent rains have resulted in lower-than-expected irrigation demand for this time of year.

Districts are also communicating to non-irrigators who receive water from the district to reduce water use consistent with the MOU agreement (e.g., 5-10% if the purpose is municipal).

Municipalities

Municipalities continue to implement voluntary restrictions, provide education and communication about wise use of water, and implement water conservation actions (e.g., rain barrel programs and xeriscaping). The City of Lethbridge and the County of Lethbridge are coordinating communication and outreach efforts.

Notification of Activation of Water Sharing Agreement to Water License Holders (Non-Signatory to the MOU)

Water users that operate under their own water license, outside of municipal or district conveyances, have been asked by the Minister of Environment and Protected Areas to match the water use reductions of the MOU signatories. Letters have been sent to all affected license holders to notify them of the activation of the water sharing agreements and the specific reductions agreed to by the MOU signatories. Copies of these letters and additional support for licensees can be found at alberta.ca/drought

Bow River Basin

Water Sharing Agreement Activation Status

Based on conditions in the basin, operational needs and other observations, the MOU Signatories have made the unanimous decision not to activate the Water Sharing Agreement at this time.

Basin Conditions Summary

The basin continued to see precipitation in the normal range for this time of year, and recent rainfall events have contributed to lower demand for water. Key reservoirs are at normal levels for this time of year, with some TransAlta managed reservoirs below normal due to planned operational work and dam safety inspections. Streamflows are within the normal range and instream objectives are being met. Snow pillows are still active with some snowmelt still expected in coming weeks.

Environment and Climate Change Canada's long-range forecast indicates temperatures above normal (province-wide) and precipitation below normal (Southern Alberta) from June-August. Signatories continue to monitor conditions, meet bi-weekly, and are prepared to adjust if conditions worsen.

Drought Management Metrics

1. Instream Objectives

• All mainstem instream objectives in the basin are being met.

2. Shortages¹

There are no reported shortages in the basin.

3. Reservoir levels (as of June 19)

Most reservoirs in the Bow River Basin are filled within normal range for this time of year.

Type of managed reservoir	Reservoir name	Normal storage (%)	Current storage (%)	Comments
GoA	Lake McGregor	85-90	95	No change from last week
Private	Lake Newell	87-92	95	1% increase from last week
TransAlta	Barrier Lake	58%	17	No change from last week – reduced capacity due to demand safety investigations
TransAlta	Bearspaw	95-97	96	No change from last week
TransAlta	Cascade	52-59	46	3% increase from last week
TransAlta	Ghost	75-86	44	6% decrease from last week
TransAlta	Lower Kananaskis Lake	39-45	45	No change from last week
TransAlta	Spray	38-48	34	5% increase from last week
TransAlta	Upper Kananaskis Lake	38	56	4% increase from last week
City of Calgary	Glenmore	35-62	65	1% increase from last week

Maintenance is occurring on some TransAlta locations resulting in some minor shifts in storage. Volume normally stored in Barrier Reservoir is being held upstream in Lower Kananaskis Lake until repairs and maintenance have been completed.

Summary of Management Actions by MOU Signatories

- Irrigation districts report that significant rain in the past week has caused a substantial drop in demand, and overall
 demand is down from the same time last year and previous years. As temperatures rise over the next week demand is
 expected to increase.
- The City of Calgary is continuing to focus on repairing a major water line break that occurred on June 5th. The City has temporarily paused drought-related communications (e.g., marketing and outdoor water use restrictions) and is prioritizing communications related to the emergency response.
- Industrial MOU signatories have continued to implement water reductions where possible.

Red Deer River Basin

Water Sharing Agreement Activation Status

Based on conditions in the basin, operational needs and other observations, the MOU Signatories have made the unanimous decision **not to activate** the Water Sharing Agreement at this time.

Basin Conditions Summary

Precipitation in the basin is above normal this spring, with recent precipitation and cooler temperatures continuing to alleviate drought risk in the basin. Reservoir levels are within normal ranges for this time of year. Low flows are reported at some headwater streams, however all mainstem instream objectives relevant to the Water Sharing Agreements are being met. There are some water shortage advisories in the Red Deer River basin, however, this is not uncommon for this time of year. Signatories are reporting low to normal demands for this time of year and no short-term drought impacts are being reported.

Environment and Climate Change Canada's long-range forecast indicates temperatures above normal (province-wide) and precipitation below normal (Southern Alberta) from June-August. Signatories continue to monitor conditions, meet monthly, and are prepared to adjust if conditions worsen.

Drought Management Metrics

- 1. Instream Objectives
- All mainstem instream objectives in the basin are being met.
- 2. Shortages1
- There are no reported shortages in the basin.

3. Reservoir levels (as of June 19)

Type of Managed Reservoir	Reservoir	Normal storage (%)	Current storage (%)	Comments
GoA	Dickson Dam/Gleniffer	63-77%	78%	No change from last week.
Private	Crawling Valley	93-95%	97%	1% increase from last week
Private	Snake Lake	100%	106%	Full - no change from last week.

Summary of Management Actions by MOU Signatories

- Municipalities and regional water commissions continue to promote voluntary, educational programs and communication strategies to conserve water within their communities and report low to normal demand for this time of year.
 - The Mountain View Regional Water Services Commission reported higher than normal demand due to bulk water hauling to support Calgary's emergency water needs, following the major water main break that occurred on June 5th.
- Industrial signatories continue to implement water reductions where possible and maintain normal operations.