Water Sharing Agreement Meeting Report - May 9, 2024

This report summarizes the outcomes of the meetings that took place on May 9, 2024 in support of the Water Sharing Agreements. 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 <u>alberta.ca/drought</u>.

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 activate the Water Sharing Agreements as of May 9th, 2024.

Basin Conditions Summary

Stream flows at all reporting stations in the basins are low, despite recent precipitation events. Reservoir levels are lower than normal, and operations are prioritizing capturing runoff, maximizing storage, while ensuring dam safety. Recent rains have delayed seeding in some areas with demands being postponed until soil moisture levels reduce.

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.

3. Reservoir levels (as of May 9)

• Most reservoir levels in the Oldman River and Southern Tributaries Basins are lower than normal for this time of year.

Type of managed reservoir	Reservoir name	Normal storage (%)	Current storage (%)	Comments
GoA	Oldman Reservoir	60-65	42	2% increase from last week
GoA	Keho Reservoir	83-89	86	2% increase from last week
GoA	Chain Lakes	67-100	100	7% increase from last week
GoA	Pine Coulee	74-84	40	3% increase from last week
GoA	Waterton	61-74	48	2% decrease from last week
GoA	St. Mary	63-81	52	No change from last week
GoA	Payne Lake	83-88	91	1% decrease from last week
GoA	Milk River Ridge	69-88	53	7% decrease from last week
Private	Crawling Valley	N/A	87	No change from last week
Private	Snake Lake	N/A	67	No change from last week
Private	Chin Reservoir	78-84	38	No change from last week
Private	Murray	69-77	56	No change from last week
Private	40 Mile	95-99	50	No change from last week

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

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.

Summary of Management actions by MOU signatories

Irrigation districts

Irrigations districts are beginning operations for the year and are actively communicating with irrigators about water conservation.

All irrigation districts in the basins have announced reduced farm gate allocations for the 2024 season. The announced changes represent approximately 50% reduction from normal.

Basin	Irrigation District	2024 announced allocation Farm Gate Delivery* (inches per acre)
Oldman South Saskatchewan River Basin	Lethbridge Northern Irrigation District	8
	St. Mary River Irrigation District	8
	Raymond Irrigation District	8
	United Irrigation District	8
Southern Tributaries	South West Irrigation District	8
	Magrath Irrigation District	8
	Mountain View Irrigation District	8

Municipalities

Municipalities have started to enact educational programs and communication strategies to conserve water within their communities.

Basin	Municipality	Water conservation actions taken by municipalities		
	City of Medicine Hat	Voluntary community wide conservation measures in place und		
		Phase 1 of Drought Management Plan.		
Oldman South Saskatchewan River Basin		Modified city operations to reduce water consumption.		
	City of Lethbridge	Voluntary community wide conservation measures in place.		
		Modified city operations to reduce water consumption.		
	County of Lethbridge	Water shortage management plan under development.		
Southern	County of Warner	Drought education and outreach efforts are underway		
Tributaries	-	2024 Spring County Newsletter.		

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

Recent precipitation and cooler temperatures have improved conditions in the basin. Seeding has been delayed due to high soil moisture and as a result, irrigation demand has been lower than expected. These conditions have reduced pressure on the basin with no short-term drought impacts being reported.

Drought Management Metrics

1. Instream Objectives

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

2. Shortages

• There are no reported shortages in the basin.

3. Reservoir levels (as of May 9)

• 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	80-90	89	6% increase from last week
GoA	Travers	60-65	65	9% increase from last week
Private	Lake Newell	94-96	95	No change from last week
TransAlta	Barrier Lake	36-46	13	6% decrease from last week due to operational maintenance* (see note below)
TransAlta	Bearspaw	85-96	95	2% increase from last week
TransAlta	Cascade	31-37	32	1% decrease from last week
TransAlta	Ghost	53-74	54	11% decrease from last week. Water is being released to lower the reservoir per the Water Management Services Agreement
TransAlta	Lower Kananaskis Lake	12-15	77	2% decrease from last week* (see note below)
TransAlta	Spray	8	8	1% decrease from last week
TransAlta	Upper Kananaskis Lake	23-24	39	1% decrease from last week
City of Calgary	Glenmore	39-66	67	7% decrease from last week due to maintenance.

*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 signatories

- City of Calgary has started educational programs and communications to build drought awareness and promote water conservation in the communities. An example of this is the <u>YardSmart campaign</u> on drought resistant gardening including rain barrel use. Industry has implemented water reductions where possible.
- Irrigation districts are just starting their operations for the year with many reporting normal flows and reservoir levels for this time of year. Due to recent precipitation demand to irrigation districts is currently very low.

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

Recent precipitation has improved conditions in the basin. With seeding being delayed due to high soil moisture, irrigation demand has been lower than expected. These conditions have alleviated pressure on the basin with no short-term drought impacts being reported. Gleniffer Reservoir is targeting and maintaining a fill rate that follows the upper normal operating range with no concerns in achieving normal storage levels to maintain normal downstream flows.

Drought Management Metrics

1. Instream Objectives

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

2. Shortages

• There are no reported shortages in the basin.

3. Reservoir levels (as of May 9)

Reservoir	Normal storage (%)	Current storage (%)
Dickson Dam/Gleniffer	48-63%	50%

Summary of Management actions by MOU signatories

- Municipalities have started to enact voluntary, educational programs and communication strategies to conserve water within their communities. Rain barrels, for example, are being used across communities to capture rainwater.
- Industry has implemented water reductions where possible, and several have planned shutdowns and turn-arounds during the spring and early summer period. Shutdowns or turn-arounds reduce water use.