



POLICY

WATER CONSERVATION POLICY

Policy Number:	6 (2025)
Policy Review:	Every 5 Years or upon Legislative Change
Reference(s):	Water Supply Agreement Provincial Drought Response Plan Water Sharing Memorandum of Understanding

1. PURPOSE OF POLICY

- 1.1. To minimize the impact of water shortages on Members.
- 1.2. To define roles and responsibilities and ensure consistent decision-making during times of emergency, disasters, and drought.

2. POLICY STATEMENT

- 2.1. The North Red Deer River Water Services Commission recognizes:
 - 2.1.1. The importance of the Province maintaining adequate raw water reserves in the Glennifer Reservoir (Dickson Dam).
 - 2.1.2. The importance of Members maintaining adequate treated water reserves in their community reservoirs.
 - 2.1.3. The importance of the NRDRWSC and Members being prepared to respond to operational emergencies that may lead to a shortage of treated water.
 - 2.1.4. The importance of the NRDRWSC and Members responding to drought conditions so that as many water users as possible will continue to have water for essential purposes.
 - 2.1.5. The importance of communicating water shortages and emergencies to its Members.
 - 2.1.6. The importance of treating each Member, fairly, equitably, and without preference.
- 2.2. The Commission will collaborate with its Members to develop a water shortage regional Standard Operating Procedure (SOP).
- 2.3. Notwithstanding anything in this Policy, the NRDRWSC will comply with Provincial Orders.

3. APPLICABILITY

- 3.1. This Policy applies to the Commission, and the Member communities of the Commission.
- 3.2. This Policy comes into effect upon approval of Board of Directors.

4. DEFINITIONS AND ABBREVIATIONS

Definitions outlined in Bylaw 1 apply to this Policy. Policy-specific definitions are listed below.



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- 4.1. **Advisory** – means a precautionary notice when a potential problem exists, or only applies to a small section of the transmission/distribution system.
- 4.2. **AHS** – means Alberta Health Services.
- 4.3. **CRD** – means City of Red Deer.
- 4.4. **Drought Condition** – means, for purpose of this Policy, Drought Stages 3, 4, or 5 as determined by the Government of Alberta.
- 4.5. **Drought Stages** – means the degrees of drought severity determined by the Government of Alberta and described in the Alberta Drought Response Plan 2024.
- 4.6. **Emergency Water Condition Type 1** – means situations where the City of Red Deer is unable to fully meet the Commission’s treated water demand due to factors such as planned or unplanned mechanical downtime, water quality issues, mechanical failure, insufficient treated water reserves to meet fire flow requirements, or other emergencies or disasters that disrupt the operation of the City’s treatment and distribution/conveyance systems.
- 4.7. **Emergency Water Condition Type 2** – means situations where the Commission is unable to fully meet the Member’s treated water demand due to factors such as a transmission line break, lateral line break, planned or unplanned mechanical downtime or other emergencies or disasters that disrupt the operation of the Commission’s transmission system.
- 4.8. **Emergency Water Condition Type 3** – means situations involving the outflow at Dickson Dam and a Stage 3, 4, or 5 drought declared by the Government of Alberta for the Red Deer River Basin. This condition may involve activating a Water Sharing Memorandum of Understanding or the Province issuing a provincial order regarding water diversion.
- 4.9. **EPA** – means Alberta Environment and Protected Area.
- 4.10. **Notice** – means any type of water advisory, order, or information.
- 4.11. **NRDRWSC** – means North Red Deer River Water Services Commission.
- 4.12. **Order** – means a mandatory order when water reserve supplies are threatened, and conservation measures must be undertaken.
- 4.13. **Water Conservation Levels** – means the Commission’s progressive response framework based on the Emergency Water Condition Type and associated triggers, defining the roles and responsibilities of the Commission and its Members during water shortages.

5. ROLES AND RESPONSIBILITIES

- 5.1. Board of Directors
 - 5.1.1. Approve this Policy.
 - 5.1.2. Comply with this Policy.
- 5.2. Manager/CAO



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- 5.2.1. Ensure Commission Administration compliance with this Policy.
- 5.2.2. Comply with this Policy.

6. POLICY DETAILS

6.1. Responding to Emergency Water Conditions

- 6.1.1. **Schedule A** outlines the Water Conservation Framework for our progressive response to the Emergency Water Conditions.
- 6.1.2. **Schedule B** is an interim Emergency Water Condition Action Plan to be replaced with a water shortage regional Standard Operating Procedure (SOP) in the future.
- 6.1.3. **Schedule C** outlines the scope of the NRDRWSC Notices, Advisories and Orders within the context of this Policy.

7. END OF POLICY

ORIGINAL SIGNED

Signature of Chair

ORIGINAL SIGNED

Signature of Manager

Date

Date

POLICY RECORD

Approval and Amendment History

Date of Board Meeting	Description
February 20, 2025	Replaces Policy 6 (2009)

Review History

Date of Policy Owner's Review	Description/Action Taken or Required
December 2024	Update Policy to replace Policy 6 (2009)

Schedule A: Water Conservation Framework

Water Conservation Levels								
Triggers	Level 0		Level 1		Level 2		Level 3	
RD River Basin Drought Stage	0 to 2		3		4		5	
Dickson Dam Outflow	-		-		-		Less than 16m ³ /s	
Estimated Supply Outage Time	-		10-12 Hours		12-30 Hours		30+ Hours	
Reservoir Level	-		-		Less than 50% (35% Wolf Creek)		Below Minimum Fire Level	
Reservoir Inlet Pressure	-		Less than 150 kPa		Less than 130kPa		Less than 100 kPa	
Chlorine Residual	-		-		Less than 1.00 mg/L at Reservoir		Less than 0.5 mg/L at Reservoir	
Bacteriological Test – Fail	-		-		1 Member Affected		More than 1 Member Affected	
	NRDRWSC	Members	NRDRWSC	Members	NRDRWSC	Members	NRDRWSC	Members
Emergency Water Condition Type 1: City of Red Deer	Monitor	Monitor	Issue Notice to Member(s)	Prepare Local Water Conservation Tactics	Issue Advisory to Member(s)	Implement Local Water Conservation Tactics	Issue Order to Member(s)	Local Emergency Response
Emergency Water Condition Type 2: NRDRWSC	Monitor	Monitor	Issue Notice to Member(s) Investigate & Mitigate	Prepare Local Water Conservation Tactics	Issue Advisory to Member(s) Supplement with Contract Resources.	Implement Local Water Conservation Tactics	Issue Order to Member(s)	Local Emergency Response Comply with Provincial Orders
Emergency Water Condition Type 3: Government of Alberta	Monitor	Monitor	Issue Notice to Member(s)	Prepare Local Water Conservation Tactics	Issue Advisory to Member(s) Activate Water Sharing MOU	Implement Local Water Conservation Tactics	Issue Order to Member(s) Comply with Provincial Orders	Comply with Provincial Orders

Schedule B: Interim Emergency Water Condition Action Plan

1. Emergency Water Condition Type 1

In the event of an Emergency Water Condition Type 1, the following actions will be taken:

- 1.1 The CRD identifies a problem with the water supply affecting the NRDRWSC system.
- 1.2 CRD contacts NRDRWSC by all emergency numbers provided.
- 1.3 NRDRWSC notifies Member CAOs of the water emergency and initial response.
- 1.4 NRDRWSC determines response in accordance with the Water Conservation Framework.
- 1.5 CRD acts in its discretion to mitigate the issue causing the water shortage.
- 1.6 Members determine community level response in accordance with their local emergency response plans.
- 1.6 NRDRWSC proactively seeks regular updates from CRD.
- 1.7 NRDRWSC issues Water Conservation Notice to Members if warranted.
- 1.8 NRDRWSC issues Water Conservation Advisory to Members if warranted.
- 1.9 NRDRWSC issues Water Conservation Order to Members if warranted.

2. Emergency Water Condition Type 2

In the event of an Emergency Water Condition Type 2, the following actions will be taken:

- 2.1 Commission staff identify a problem with Commission infrastructure based on SCADA system data or field inspection.
- 2.2 Commission CAO to be advised immediately.
- 2.3 NRDRWSC determines response in accordance with Schedule A: Water Conservation Framework.
- 2.4 Members determine community level response in accordance with their local emergency response plans.
- 2.5 NRDRWSC issues Water Conservation Notice to Members if warranted.
- 2.6 NRDRWSC issues Water Conservation Advisory to Members if warranted.
- 2.7 NRDRWSC issues Water Conservation Order to Members if warranted.

3. Emergency Water Condition Type 3

Commission Administration will monitor communications from the Government of Alberta, and take action based on the Dickson Dam Outflow and Drought Stages identified in the Alberta Drought Response Plan, and actual flow rates in the Red Deer River. The following actions will be taken:

- 3.1. Drought Stage 0
Business as usual. Water usage as per Member bylaw requirements.
- 3.2. Drought Stage 1
Business as usual. Water usage as per Member bylaw requirements.
- 3.3. Drought Stage 2
Business as usual. Water usage as per Member bylaw requirements.

- 3.4. Drought Stage 3
Administration to Communicate to Members the details of the identified concerns and will participate in Water Sharing MOU meetings as required. NRDRWSC recommends Members **prepare for** potential water conservation measures.
- 3.5. Drought Stage 4
Administration to issue an Advisory to Members with details of the identified concerns and will recommend the Water Sharing MOU signatories activate their non-binding water use reduction commitments. NRDRWSC recommends Members **implement** water conservation tactics.
- 3.6. Drought Stage 5
Administration to issue Order with details of the escalating situation. and will participate in Water Sharing Agreement meetings as required. NRDRWSC recommends Members **escalate and enforce** local water conservation tactics.

Schedule C: NRDRWSC Notices, Advisories and Orders

The Water Conservation Notices, Water Conservation Advisories, and Water Conservation Orders are critical tools to guide our collective response during times of water shortage. These measures aim to encourage Members to reduce water consumption during times of water shortage.

1. Water Conservation **Notices** to Members may include:
 - Recommendations to prepare local water conservation tactics
2. Water Conservation **Advisories** to Members may include:
 - Recommendations to implement local water conservation tactics
 - A water conservation target
 - Suggested key public messaging
3. Water Conservation **Orders** to Members may include:
 - The imposition of reasonable restrictions on the delivery of Water
 - Recommendations to escalate and enforce local water conservation tactics
 - A water conservation target
 - Recommendations for the Members to work directly with major water customers to reduce consumption
 - Suggested key public messaging
 - i. Residential customers
 - ii. Industrial and commercial, customers
 - iii. High-risk facilities such as hospitals, long-term care facilities and childcare centres.